THOUGHT AND LANGUAGE IN WHITEHEAD'S CATEGORIAL SCHEME

by

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A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy in the
University of Michigan

Ann Arbor, Michigan
June, 1941

ACKNOWLEDGMENTS

I wish to express my thanks to Professor DeWitt H. Parker for his guidance in this study; to Professor Roy W. Sellars for his valuable seminar discussions; to Professor William Frankena for his helpful and sympathetic criticism; and to Professor Robert C. Angell and Professor Charles B. Vibbert for their encouragement.

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CHAPTER I

INTRODUCTION

SECTION I. INTRODUCTORY

This thesis is a critical study of thought and language as their natures are implied in Whitehead's categorial scheme. In studying the natures of thought and language in terms of Whitehead's categorial notions we make an approach to his metaphysical treatment of them as components in the universe of experience. Our quest is to understand how Whitehead analyzes the intelligence of mankind by an appeal to ontology.

We are justified in undertaking such a study for a dual set of reasons: a) The importance for philosophy of the problems of thought and language; b) the significance of Whitehead as one of the greatest metaphysicians of the present age. Questions about the nature of thought, the relation of thought to reality, and the functions of thought have been perennial in philosophical discussion. I need only mention the movement initiated by the publication of Wittgenstein's Tractatus Logico-Philosophicus in 1922 to justify the contention that language too, is now one of the major philosophical problems. Moreover, outside the realm of questions raised by the Logical Positivists, language increasingly is being recognized as an integral part of human life. The relation of language to thought and its role in communication are practical problems which must be faced as well as the more abstract ones about the nature of symbolism and the efficacy of language in the description of reality.

Whitehead as one of our greatest contemporary metaphysicians, must assuredly have a worth-while contribution along these lines. Furthermore his metaphysical approach to these problems by the way of his categorial scheme is unique when compared with the logical, linguistic, sociological, and psychological analyses made by other contemporaries.

Whitehead's written work is not too well understood because of certain obscurities in phraseology and style. Our study is justified if in a critical way it makes explicit Whitehead's metaphysical contributions to the theory of thought and language.

Within the framework of this study, however, we propose to investigate a particular problem, which in itself is ample justification for our study. The problem as we shall see is not only intrinsically significant but will also lend direction to our study. This problem is whether the natures of thought and of language as implied and developed within the terms of the categorial scheme are consonant with the 'non-categorial' assertions about thought and language which Whitehead has often enunciated. We shall see presently that for Whitehead a completed categorial scheme is synonymous with one's final metaphysical position. By the term 'non-categorial', then, I mean assertions which when uttered by Whitehead conceivably were not prefaced by the phrase 'the categorial scheme is such that.' This of course means all assertions made by Whitehead when he was not thinking implicitly in terms of his categorial notions. We know that many of the categorial notions and a vague outline of a complete cosmology were anticipated in Whitehead's works prior to the publication of *Process and Reality*. We have in mind especially certain chapters of *Science and the Modern World*. Accordingly we can expect to find categorial as well as non-categorial propositions which were uttered prior to the first publication of the categorial scheme in *Process and Reality*. And conversely, we can expect to find both non-categorial and categorial propositions appearing after the presentation of the scheme in the second chapter of the Gifford Lectures. A minor point that should be noted here is that the phrase 'before the presentation of the scheme' applies to the introductory chapter titled 'Speculative Philosophy'. This chapter is replete with non-categorial assertions.

There is of course difficulty in determining the status of a given proposition. How we are to know whether an assertion is categorial or 'non-categorial' requires more objective criteria than mere conceivability of what Whitehead was thinking when he uttered certain sentences. Conceivability may dwindle to mere opinion, limited to the powers of imagination and of reasoning of the individual. In order to meliorate the difficulty we may use the following criteria: (a) 'Categorial' propositions are those couched in terms of the categorial notions or are readily expressible in terms of those notions. (b) 'Non-categorial' propositions are those which appear to be (i) presuppositions on which the construction of the scheme is based; (ii) propositions which have no apparent origin in the scheme and which after initial scrutiny cannot be interpreted in terms of the scheme. This second criterion of course is significant only when dealing with statements made subsequent to the presentation of the scheme.

Employing the distinctions we have made we find that Whitehead has a well-defined philosophy of thought and of language which is couched in 'non-categorial' terms. This philosophy consists mainly of the presuppositions on which the scheme itself is based. Since he has quite freely expressed his views it is generally known that as far as thought is concerned he is a rationalist, that he follows the tradition of Spinoza, Leibniz, Descartes, Kant; that he is opposed to rigid empiricism. As for language he has volubly deplored the inability of it to describe either our ideas or reality. Furthermore he conceives language to be an extension of man's tool-making faculty and has freely invented his own terminology. Incidentally this nomenclature has confused and even enraged some of his contemporaries. We see now that the question of whether this 'non-categorial' position is in harmony with the nature of thought and of language as they are developed within the framework of condensed cosmological ideas presents an interesting problem. The problem lends focus to the general study of the place of thought and language in Whitehead's organic universe.

Our particular problem however has a deeper significance than the mere question of consistency or inconsistency on the part of Whitehead. The presupposition on the part of Whitehead that metaphysics is possible, and this is stated plainly in the introductory chapter 'Speculative Philosophy' of Process and Reality, is non-categorial in the sense in which we have defined the term. This faith in the power of speculative thought is the beginning of the construction of the categorial scheme. It is over and beyond it. But the categorial scheme, or Whitehead's complete metaphysics, purports to explain every element of experience. To substantiate its claim to complete generality it must explain how metaphysical cognition can be an element in the world of experiences. A complete metaphysics must explain how itself came to be. There is an obvious violation of

Russell's type theory here when we require a metaphysics to account for its own possibility. But it seems to me that the theory of types must inevitably break down when we consider propositions about metaphysical propositions. Either the theory of types is waived or metaphysics must be abandoned. There is a certain priority in metaphysics which allows it to be responsible for its own explanation. Whitehead observes that "logical notions must themselves find their places in the scheme of philosophic notions."[1] We are asking that metaphysical notions as well be accounted for within the framework of ideas which explain every element of experience.

The point is that we are asking Kant's question 'Whether such a thing as metaphysics be even possible at all?' and are stipulating that the reply be grounded on the nature of things, i.e., given in terms of the categorial notions.

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[1] Alfred North Whitehead, *Process and Reality* (New York: The Macmillan Company, 1929), p. 5. Hereinafter the abbrevication "P.R." will be used when referring to *Process and Reality*. Other abbreviations to be used are as follows: "A.I." for *Adventures of Ideas* (New York: The Macmillan Company, 1933); "C.N." for *The Concept of Nature* (Cambridge: University Press, 1920); "F.R." for *The Function of Reason* (Princeton: Princeton University Press, 1929); "M.T." for *Modes of Thought* (New York: The Macmillan Company, 1938); "P.N.K." for *An Enquiry Concerning the Principles of Natural Knowledge* (Cambridge: University Press, 1925); "R.M." for *Religion in the Making* (New York: The Macmillan Company, 1930); "S." for *Symbolism, Its Meaning and Effect* (New York: The Macmillan Company, 1927); "S.M.W." for *Science and The Modern World* (New York: The Macmillan Company, 1925).

Whitehead answered the question in non-categorial terminology before he constructed his categorial scheme. We now propose to see whether in his description of the nature of things he shows how metaphysical cognition can arise naturally as an adjunct within experience. Whitehead frankly contends that "the epistemological difficulty is only solvable by an appeal to ontology."[1] We seek a solution of the metaphysical difficulty likewise by an appeal to his ontology.

It should now be obvious that the question involved in the problem of 'non-categorial' versus categorial assertions is not one of discrepancy between Whitehead's 'earlier' and 'later' views. The earlier views are commonly regarded as being expressed in works prior to the publication of Process and Reality with Science and the Modern World the work of transition. We do not have in mind the pitting of The Principle of Natural Knowledge and The Concept of Nature against Process and Reality and The Adventures of Ideas. What we are mindful of is the fact that Whitehead has not given enough careful attention to the problems of thought, language, and the possibility of metaphysics within the framework of his metaphysical scheme. Perhaps this neglect has been due to his preoccupation with the doctrines of time, of space, of perception, and of causality. He has done excellently in his treatment of them. Perhaps it seemed unnecessary for him to go into an elaborate treatment of thought, language, and metaphysics in terms of his generic notions because he has said so much about them in extra-categorial terms. And still another possibility is that he considered the generic notions adequate for the expression of any possible element of phenomena and left the application of the schematic ideas to certain problems like those of thought and language to be done at a later date. All of these explanations have their measure of truth. The third is borne out by the discussion in a recent work[1] of certain notions in categorical terms in an endeavor to analyze human intelligence. However there still remains the plain fact of a philosophy of thought and of language expressed in non-categorial terms and another philosophy indicated or implied within the framework of the categorial scheme. Our problem is to see if the two views are reconcilable.

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[1] Ibid., p. 288.

Since there is a particular problem which lends direction to our study this thesis is written with an hypothesis--the hypothesis that there is a lack of agreement between the well-cut philosophy of thought and language expressed by Whitehead in his many non-categorial assertions and the philosophy of thought and language implied by the categorial notions. However the author would prefer to say that the thesis is written with a point of view

[1] Cf. M.T., chaps. i, ii, iii.

rather than with an hypothesis. For in the case of Whitehead who is profound, but obscure and aphoristic, one might, by concentrating on details, 'prove' an hypothesis which was not a true picture of Whitehead's theory. In several instances, it seems to me, critics who tried to prove an hypothesis about Whitehead found the trees but failed to see the forest. They missed completely the magnificent sweep of his thought.

Our point of view, if we may so name the hypothesis, is that thought as it is developed in terms of the categorial scheme is a stage in the growth of individuals. Thinking is self-expression and as such is more imaginative poetry than scientific or philosophic description. This conflicts with Whitehead's presupposition that speculative philosophy is able to produce an objective body of knowledge. As for language, it appears that within the framework of the scheme, it too is expression. There is a divergence from the 'tool-making' theory and a closer approximation to the sociological theories of Dewey and Mead.

However there will be no rigid attempt to prove these points and as is fitting their justification will be relegated to the concluding chapter. The chief advantage in holding a point of view is that the theory dictates the method of procedure in our investigation. In this instance the study of thought and language is centered around the progressive stages of growth in high-grade actual entities because it is our contention that thought and language within the framework of the scheme are stages in the growth of individuals and really yield no objective body of knowledge. However the real contribution of the thesis lies in the critical exposition of Whitehead's metaphysical solutions of the problems of thought and of language.

What has been said thus far is intended to be a brief statement of the nature of our study. We shall continue now with an introduction to Whitehead which should make the nature of our quest much clearer.

SECTION II. WHITEHEAD'S CONCEPTION OF THE NATURE OF PHILOSOPHY

There are two traditions about the aim of philosophy. One is the belief that the proper work of philosophy consists in the detailed, critical investigation of particular problems; the other admits the value of special investigation but contends that the true goal of philosophy is the systematic construction of a comprehensive world view. Those who adhere to the former view are the specialists in epistemology, logic, ethics, and aesthetics. Those who follow the latter are the metaphysicians. The Whitehead we present in this study is frankly a metaphysician. Unless one appreciates in some measure the value as well as the magnitude of the metaphysician's task there can be little sympathy with and hence little understanding of Whitehead's philosophy.

"By 'metaphysics'", says Whitehead, "I mean the science which seeks to discover the general ideas which are indispensably relevant to the analysis of everything that happens."[1] Metaphysics then is characterized by its universality. This complete inclusiveness of metaphysics presents an interesting contrast to what Whitehead considers to be natural science.

> Natural science, is the science of nature. But what is nature? Nature is that which we observe in perception through the senses. In this sense-perception we are aware of something which is not thought and which is self-contained for thought. The property of being self-contained for thought lies at the base of natural science. It means that nature can be thought of as a closed system whose mutual relations do not require the expression of the fact that they are thought about.
>
> Thus in a sense nature is independent of thought. By this statement no metaphysical pronouncement is intended. What I mean is that we can think about nature without thinking about thought. I shall say then that we are thinking 'homogeneously' about nature.
>
> Of course it is possible to think of nature in conjunction with thought about the fact that nature is thought about. In such a case I shall say that we are thinking 'heterogeneously' about nature . . . . Natural science is exclusively concerned with homogeneous thoughts about nature.[2]

We are thinking 'homogeneously' about nature when we are thinking about it without thinking about thought or about sense-awareness, and we are thinking heterogeneously about it in conjunction with thinking either about thought or about sense-awareness or about both.[1]

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[1] *R.M.*, p. 84.

[2] *C.N.*, p. 3.

Natural science then has its particular domain, the world we perceive through the senses. Whitehead in the preface to one of his natural science works expresses it this way: "We are concerned only with Nature, that is, with the object of perceptual knowledge, and not with the synthesis of the knower with the known. This distinction is exactly that which separates natural philosophy from metaphysics."[2]

These quotations were purposely taken from Whitehead's natural science works because they show vividly that he considered it to be the duty of metaphysics to explain thought. In fact in these earlier works the chief difference between natural science and metaphysics lay in the exclusion or inclusion respectively of knowing and thinking as elements in the 'nature' which was described. Of course he excluded any reference to moral or aesthetic values in the homogeneous description of nature. Values of this kind whose apprehension is vidid in proportion to self-conscious activity he relegated to the realm of metaphysical synthesis.[3] But for Whitehead one essential

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[1] *Ibid*., p. 5.

[2] *P.N.K.*, p. vii.

[3] Cf. *C.N.*, p. 5.

---

knowing as complexes within the whole of nature.

He has this same point of view when he first attempts to do metaphysics in *Science and the Modern World*. According to him the metaphysical chapters of that book are purely descriptive and consist of a dispassionate consideration of the nature of things, antecedently to any special investigation into their details. The justification for calling the chapters metaphysical is sought, (i) in our direct knowledge of the actual occasions which compose our immediate experience. (ii) In their success as forming a basis for harmonising our systematized accounts of various types of experience. (iii) In their success as providing the concepts in terms of which an epistemology can be framed. By (iii) Whitehead means "that an account of the general character of what we know must enable us to frame an account of how knowledge is possible as an adjunct within things known."[1] [illegible]

In this list of 'justifications' for a metaphysics we may note that (i) is not a criterion but is an appeal to the common-sense notion that we can know something about our immediate experience. (ii) and (iii) are properly speaking, criteria for a metaphysics. In (ii) there is the requirement of synthesis. But in (iii) there is a feature of metaphysics is that it explains thinking and knowing as complexes within the whole of nature.

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[1] [illegible], pp. 219-20.

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[1] Cf. *op. cit.*, pp. 219-20.

When Whitehead finally comes to presenting his complete metaphysics, he has lost his bias toward the defining of metaphysics by the inclusion of an explanation of thought and knowing. Emphasis is upon synthesis and universality. "The study of philosophy is a voyage towards the larger generalities."[1] Metaphysics in Process and Reality is the science which seeks to discover the general ideas which are indispensably relevant to the analysis of everything that happens. Knowing, thinking, and communicating are elements like other elements in the all inclusive whole. They have no initial priority but they still must be explained satisfactorily along with other experiences.

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[1] P.R., p. 14.

SECTION III. THE SCHEMATIC METHOD

We have from time to time referred to Whitehead's categorial scheme as constituting his metaphysics. This schematic presentation of his final philosophic ideas is a striking feature which sets him apart from most contemporary metaphysicians. Metaphysics, or speculative philosophy, or categorial construction, all these are synonymous terms. They represent the same activity, the attempt to formulate an accurate expression of the final generalities. Whitehead expresses this conception of philosophy in Process and Reality several times before the actual presentation of his categorial scheme. In the preface he writes:

> In these lectures I have endeavored to compress the material derived from years of meditation. In putting out these results, four strong impressions dominate my mind: First, that the movement of historical, and philosophical, criticism of detached questions, has done its work, and requires to be supplemented by a more sustained effort of constructive thought. Secondly, that the true method of philosophical construction is to frame a scheme of ideas, the best that one can, and unflinchingly to explore the interpretation of experience in terms of that scheme. Thirdly, that all constructive thought . . . is dominated by some such scheme, unacknowledged, but no less influential in guiding the imagination. The importance of philosophy lies in its sustained effort to make such schemes explicit, and thereby capable of criticism and improvement.
>
> There remains the final reflection, how shallow, puny, and imperfect are efforts to sound the depths in the nature of things. In philosophical discussion the merest hint of dogmatic certainty as to finality of statement is an exhibition of folly.[1]

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[1] Ibid., p. x.

It is significant to note that while in the passage quoted above Whitehead is arguing for system in philosophy, in his final reflection he cautions against a closed system. He continues this same dual emphasis, that of systematization but open mindedness in the following:

> Philosophy will not regain its proper status until the gradual elaboration of categorial schemes, definitely stated at each stage of progress, is recognized as its proper objective. There may be rival schemes, inconsistent among themselves; each with its own merits and its own failures. It will then be the purpose of research to conciliate the differences. *Metaphysical Categories are not dogmatic statements of the obvious; they are tentative* formulations of the ultimate generalities.[1]

Finally, in support of our contention that metaphysics, categorial construction, and speculative philosophy are synonymous terms, and that as such we have the right to search for a categorial explanation of thought and language, we quote the famous opening lines of the first chapter of *Process and Reality*.

> Speculative Philosophy is the endeavor to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. By this notion of 'interpretation' I mean that everything of which we are conscious, as enjoyed, perceived, willed, or thought, shall have the character of a particular instance of the scheme. Thus the philosophical scheme should be coherent, logical, and, in respect to its interpretation, applicable and adequate. Here 'applicable' means that some items of experience are thus interpretable, and 'adequate' means that there are no items incapable of such interpretation.[2]

[1] *Ibid.*, p. 12, Italics mine.

[2] *Op. cit.*, p. 4.

What has just been quoted should give ample evidence of the inclusiveness of the scheme in which we propose to delineate the nature of thought and language. Also in some measure it should make clearer our conception of 'metaphysical' and 'non-metaphysical' assertions. However these notions will be referred to again and again when we actually begin working within the framework of the scheme itself. But at present, because we plan hereafter to work within the scheme and to hold Whitehead accountable for the categorial notions, we should examine the reasons why Whitehead lays such stress upon the formulation of a scheme as the proper method of philosophy. There are three distinct reasons for his preference for the schematic method and we shall examine each in turn.

The first reason he advances is that:

> . . . The scheme produces a greater understanding of the world, including a better definition of ideas and the more direct analysis of immediate fact. A single proposition rests upon vague apprehensions: whereas a scheme of ideas provides its own measure of definiteness by the mutual relatedness of its own categoreal notions.[1]

In proof of this defense of the schematic method Whitehead appeals to the methodology of science. A proposition which falls within a scientific scheme is accepted with surprisingly slight verification because it is supported by the whole framework of other propositions. He cites as an example the present acceptance of the famous doctrine of the shift of spectral lines. So far as direct evidence is concerned, there are some experiments which yield results capable of very dubious interpretation. But no one doubts the doctrine because it falls within the reigning scientific scheme. It is the scheme which gives a plausible explanation of the direct evidence. Within the framework of the whole there are possible solutions for the aberrant interpretations.[1]

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[1] F.R., p. 55.

The second reason for Whitehead's emphasis upon the construction of a scheme of ideas as the proper method of metaphysics is that: "The interwoven group of categoreal notions which constitute the scheme allow of derivative extension by the constructive power of deductive logic."[2] This bare statement is one of the closest approximations to seventeenth century rationalism made by any contemporary philosophy. But Whitehead explains the statement in such a way that many objections to it are removed. In fact it would seem at times that Whitehead is undecided as to the value of deduction in the schematic method. Certainly he wants it there, perhaps because of his use of deduction in Principia Mathematica, yet he cautions against it so vehemently that we wonder if its inherent dangers do not outweigh its advantages. Because this element of deduction has been criticized severely by Whitehead's critics perhaps it would be well to examine it carefully.

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[1] Cf. Ibid., pp. 55 ff.

[2] Ibid., p. 56.

Since there is the possibility of deduction Whitehead insists that the scheme be a "coherent, logical, necessary system of general ideas." Among the definitions of these criteria we find that "the term logical has its ordinary meaning, including logical consistency, or lack of contradiction, the definition of constructs in logical terms, exemplification of general logical notions in specific instances, and the principles of inference."[1] After the scheme is constructed according to these principles, we may use deduction. But the results of our deduction are always subject to a final appeal to the facts of experience.

> The scheme is a matrix from which propositions applicable to particular circumstances can be derived . . . . The use of such a matrix is to argue from it boldly and with rigid logic. The scheme should therefore be stated with the utmost precision and definiteness, to allow of such argumentation. The conclusion of the argument should then be confronted with circumstances to which it should apply.[2]

We see now that even in the arguments for deduction Whitehead qualifies them by requiring a final appeal to fact. Furthermore he cautions against a false estimation of logical procedure in respect to certainty, and in respect to premises. He considers this form of overstatement to be one of the chief errors of rationalism. He writes:

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[1] *P.R.*, p. 5.

[2] *Ibid.*, p. 13.

> Philosophy has been haunted by the unfortunate notion that its method is dogmatically to indicate premises which are severally clear, distinct, and certain; and to erect upon those premises a deductive system of thought.
>
> But the accurate expression of the final generalities is the goal of discussion and not its origin. Philosophy has been misled by the example of mathematics; and even in mathematics the statement of the ultimate logical principles is beset with difficulties as yet insuperable.[1]
>
> The method of philosophy has been vitiated by the example of mathematics. The primary method of mathematics is deduction; the primary method of philosophy is descriptive generalization. Under the influence of mathematics, deduction has been foisted onto philosophy as its standard method, instead of taking its true place as an essential auxiliary made of verification whereby to test the scope of generalities.[2]

Obviously then, deduction for Whitehead takes a secondary place in philosophic method. By quoting a few summary statements from Modes of Thought we may see his final position on deduction.

> Philosophy is the search for premises. It is not deduction. Such deductions as occur are for the purpose of testing the starting-points by the evidence of the conclusions.[3]
>
> Deductive logic has not the coercive supremacy which is conventionally conceded to it. When applied to concrete instances, it is a tentative procedure, finally to be judged by the self evidence of its issues. This doctrine places philosophy on a pragmatic basis.[4]

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[1] Ibid., pp. 11-12.

[2] Ibid., pp. 15-16.

[3] Op. cit., p. 143.

[4] Ibid., p. 144.

We thus dismiss deductive logic as a major instrument for metaphysical discussion. Such discussion is concerned with the eliciting of self-eivdence. Apart from such self-evidence, deduction fails. Thus logic presupposes metaphysics.[1]

Perhaps we have paid enough attention to Whitehead's argument that the possibility of deduction is one justification for the schematic method as we have seen he deprecates deduction as an important part of philosophy. Yet the fact remains that he does use it, though not in the rigid manner we are wont to associate with the term. There is little in Whitehead's metaphysics reminiscent of syllogistic reasoning or of the method of Spinoza. But there is a great deal of the tracing out of the implications of broad generalizations and theories. Generalizations must be derived from particular facts but the success of a generalization lies in the fact that it finds application beyond the immediate origin. Some synoptic vision must be gained. A successful philosophic generalization will, if derived from physics, find application in fields of experience beyond physics. It will enlighten observation in remote fields, say physiology and psychology, so that general principles can be discerned as in process of illustration. The continuing result of this macroscopic deduction is that generic notions which apply to all facts give us a better understanding of the world as a whole and of the particular facts of immediate experience.

[1] *Ibid*., p. 146.

If we interpret deduction in this way, and I believe, we can, then Whitehead could again appeal to the methodology of science in proof of the superiority of the schematic method and in proof of the validity of deduction from the scheme. Suppose we recall the assertion just quoted that "philosophy is on a pragmatic basis," and also a similar one taken from the Adventures of Ideas that "dominant theories are 'working hypotheses'."[1] If the premises of the categorial scheme are of this nature, then Whitehead is justified in making his macroscopic deductions.

Furthermore by yet another appeal to scientific method he need not be so apologetic for making certain minute deductions which seem apparent. Along this line of argument Miss Stebbing's discussion of scientific method[2] seems particularly relevant. According to Miss Stebbing, modern theories of scientific method make two admissions: (i) that hypothesis is indispensable, which implies a union of theory and observation in scientific theory. (ii) That the most fruitful hypotheses are those which are susceptible of mathematical development, which implies that the most satisfactory theories are those which transcend in exactness any possible verification of them by observation of what happens. From these two admissions Miss Stebbing draws the following conclusion that:

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[1] Op. cit., p. 283.

[2] See L. Susan Stebbing, A Modern Introduction to Logic (London: Methuen and Company, Ltd., 1930), pp. 487-93.

> . . . The proper method of scientific investigation is hypothetical and deductive. The development of a constructive theory into a more and more comprehensive theory is made possible only by a union of exact mathematical deduction and accurate observation. It is now generally admitted that only hypotheses which are stated in precise quantitative terms can yield satisfactory theories with regard to the order of nature. The physical sciences at all events have reached a stage of development in which the inductive methods of Bacon and Mill have ceased to be useful. The marvellously exact experiments of modern science are suggested by mathematical deductions and are at every stage controlled by theoretical considerations . . . such a procedure results in theories which are fragile because they are exceedingly comprehensive. The development of physical science from Galileo to Einstein justifies this conception of scientific method.[1]

If we may take Miss Stebbing's description of scientific method as authoritative then Whitehead could easily appeal to the success of modern science as ample evidence of the power of deduction. The progress of science has depended upon the formation of fruitful hypotheses which led to further deductions and further hypotheses. In this method the initial superfluities and errors have been gradually pared away. The importance of hypothesis in scientific method is that the element of truth in an hypothesis renders it useful as a guide to further research. And this is precisely what Whitehead has in mind when he says that we are to frame a scheme of ideas, the best that we can, and unflinchingly to explore the interpretation of experience in terms of that scheme.

[1] _Ibid._, pp. 491-92.

Although we have pointed out that Whitehead does not favor strict mathematical deduction as the proper method of philosophy we shall close this discussion with a quotation from Principia Mathematica where the method is employed to great advantage.

> In mathematics, the greatest degree of self-evidence is usually not to be found quite at the beginning, but at some later point; hence the early deductions, until they reach this point, give reasons rather for believing the premisses because true consequences follow from them than for believing the consequences because they follow from the premisses.[1]

So we see that even in its strictest form deduction need not be dogmatic.

So far we have presented two reasons why Whitehead believes systematization to be the best method for philosophy. The first was that a frame of reference gives more insight into the meaning of particular propositions. The second, which was examined in rather great detail, was that the interwoven group of categorial notions which constitute the scheme allow of derivative extension by the constructive power of deductive logic. These two arguments for the superiority of a schematic philosophy are objective in that they are applicable to any metaphysical theory. In fact Whitehead has stated that all constructive thought is dominated by some such scheme, unacknowledged, but no less influential in guiding the imagination.

[1] A. N. Whitehead and Bertrand Russell, Principia Mathematica (Cambridge; University Press, 1925), I, p. v.

The third reason why Whitehead prefers the categorial scheme is not explicitly stated by him but may be derived by an interpretation of some of his discussion. He prefers the categorial scheme because it best describes the nature of reality. Because reality is as it is the categorial scheme alone can adequately portray the depths in things. Let us note his presupposition about reality and then compare it with his requirements for the scheme.

> The coherence which the system seeks to preserve is the discovery that the process, or concrescence, of any one actual entity involves the other actual entities among its components. In this way the obvious solidarity of the world receives its explanation.[1]

There is a direct mirroring of this conception of reality in the requirements Whitehead stipulates for a categorial scheme. The scheme, as we know must be coherent, logical and necessary. We have already defined the term 'logical' and we may dismiss the term 'necessary' by noting that it is the requirement that the scheme approach the ideal of complete universality. It is in the definition of coherence that we see that for Whitehead the categorial scheme is a picture of reality, that it is a model of the reality as we think it is.[2]

[1] _P.R._, p. 10.

[2] Cf. Ludwig Wittgenstein, _Tractatus Logico-Philosophicus_ (New York: Harcourt, Brace and Company, Inc., 1922), p. 401. "The proposition is a picture of reality. The proposition is a model of the reality as we think it is."

> 'Coherence', as here employed, means that the fundamental ideas, in terms of which the scheme is developed, presuppose each other so that in isolation they are meaningless. This requirement does not mean that they are definable in terms of each other; it means that what is indefinable in one such notion cannot be abstracted from its relevance to the other notions. It is the ideal of speculative philosophy that its fundamental notions shall not seem capable of abstraction from each other. In other words, it is presupposed that no entity can be conceived in complete abstraction from the system of the universe, and that it is the business of speculative philosophy to exhibit this truth. This character is its coherence.[1]

This then is Whitehead's third reason for the choice of the schematic method, it exhibits best the nature of things, the obvious solidarity of the world. Philosophy is descriptive generalization and generalizations which cannot be abstracted from each other, as is the case in a 'coherent' scheme, best describe the interconnectedness of actual things. But we are forced to admit that this third reason of Whitehead's is more subjective than objective. It is not applicable to all metaphysical theories for there are some to whom the solidarity of the world does not express an obvious fact.[2] To those of the dissenters who see an essentially chaotic world the coherent categorial scheme of Whitehead is simply gross error. To refute this group Whitehead need only appeal to the facts of immediate experience. He might say that if they see a disunited

[1] _P_. _R_., p. 5.

[2] Cf. L. S. Stebbing, "Critical Review of Whitehead's _Process and Reality_," _Mind_, XXXIX (1930), 466-75.

world instead of an ultimate union of all things, then they are probably 'metaphysically blind.' Such an argument does not seem to me to be especially convincing but a similar one has been used to great advantage by the intuitionist in the battle of the good.

Whitehead could use another argument for this mirroring of reality by the scheme, an argument used in another context in The Adventures of Ideas. There he states that "theory dictates method."[1] If he has a theory or a working hypothesis that reality is one seamless whole, then it is only logical that he describe it by a categorial scheme whose fundamental notions presuppose each other in such a way that in isolation they are meaningless. It should be noted here however, that the formulation of a scheme according to the principles of a theory is for Whitehead the subject of study for specialists. The primary stage of philosophy he terms 'assemblage' and in this stage nothing is excluded from philosophy. From this mass of assembled facts hypotheses are chosen, theories are formed, and systematic thought begins with these presuppositions.[2]

In regard to this third reason why Whitehead prefers the schematic method we should thus bear in mind the following: (i) that it is used because it exemplifies the theory of a coherent universe. (ii) That this is justified because theory dictates method. (iii) That theory is resorted to only in the highly specialized study of philosophic systematization. For in the preface to the Gifford Lectures Whitehead states that he has "endeavored to compress the material derived from years of meditation."

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[1] Op. cit., p. 283.

[2] Cf. M.T., pp. 2-5.

Thus we have noted three reasons why Whitehead believes the true method of philosophical construction to be the framing of a scheme of ideas. First, a frame of reference gives a better definition of ideas. Secondly, a logical scheme is amenable to deduction and thus has the power of leading to new ideas. Thirdly, that a coherent scheme best describes or mirrors a coherent universe. We are to remember that schematism applies to philosophical construction, the work of specialists who have already passed the primary stage of assemblage in which nothing is excluded from their direct purview. Assemblage is "a very necessary task if we are to avoid narrowness inherent in all finite systems."[1]

A final remark might be that Whitehead's preference for schematization is so great that he cannot keep it out of the stage of assemblage though he desires to do so. In The Function of Reason he makes statements which would contradict the notion that philosophy could pass through

[1] Ibid.

a stage of assemblage which was universal because it was not bounded by a finite set of premises.

> Except for the rarest accidents of chance, thought precedes observation. It may not decide the details, but it suggests the type. Nobody would count, whose mind was vacant of the idea of number. Nobody directs attention when there is nothing that he expects to see. The novel observation which comes by chance is a rare accident, and is usually wasted. For if there be no scheme to fit it into, its significance is lost.[1]

Thus far our consideration of Whitehead's philosophic method has been centered around a discussion of the value of system. This particular aspect of Whitehead's method has been too greatly neglected in favor of superficial discussions of his 'speculative method'. The 'speculative method' is the method by which the categorial scheme is constructed. It is a combination of rationalism and empiricism in which the denial of rigid empiricism is also a denial of rigid rationalism.

> The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight in the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation.[2]

These aeroplane flights do form a unique part of Whitehead's philosophic method but it is unfortunate that too close attention to this aspect has veiled the considerable contribution he makes to philosophic method in presenting the possibilities inherent in a categorial scheme.

[1] *Op. cit.*, p. 57.

[2] *P.R.*, p. 7.

Whitehead ever contends that these flights of imaginative rationalization must have their origin in the generalization of particular factors discerned in particular topics of human interest. The aeroplane takes off from the fields of physics, or physiology, or psychology, or sociology, or aesthetics, or ethics. But it must land again on these same fields for a facing of the facts and the success of the flight is determined by the extent to which some synoptic vision has been gained.

We should remember that a completed categorial scheme is a tentative final formulation of the results of this speculative method. If the generic notions are adequate for the interpretation of every element of experience there should be a categorial explanation of the nature of speculative thought. We shall now consider some presuppositions which underlie the construction of the categorial scheme and which in our opinion are 'non-categorial' beliefs in the sense that we have defined the term, i.e., not prefaced by the thought, "the categorial scheme is such that this proposition is derivable from its general ideas."

SECTION IV. THE EXTRA-CATEGORIAL PHILOSOPHIES OF THOUGHT AND LANGUAGE

After this brief introduction to Whitehead's philosophic method, we come again to the subject of our enquiry, the nature of thought and language as they are portrayed within the framework of the categorial scheme. We are tempted to plunge headlong into the scheme and begin to discover the nature of thought and language as they arise naturally as adjuncts within reality. But we are struck by the fact that the very existence of the scheme itself involves a philosophy of the nature of thought and language. There is the belief that speculative thought enables us to construct a categorial scheme, the faith that metaphysics is possible. And such a presupposition is 'non-categorial' for it does not arise as an expression of categorial notions. There must be these presuppositions before we begin the scheme. This is a pragmatic necessity. But we are justified in asking whether the categorial scheme gives an explanation of how speculative philosophy arises naturally within experience and whether it has a valid cognitive claim to metaphysical knowledge. Therefore, before we begin our study of thought and language within the framework of the scheme we must give a brief examination of Whitehead's initial theories of thought and language.

Whitehead's initial philosophy of thought or reason is an affirmation of faith in its power to gain an understanding of the world. Speculative philosophy is attempted because of the ultimate faith that reason with disinterested curiosity can achieve an understanding of the nature of things. He brings this out clearly in *The Function of Reason* in which he describes two kinds of reason. The practical reason which is concerned with survival, the speculative reason which seeks to comprehend.

> Naught that happens is alien to it (speculative reason). It is driven forward by the ultimate faith that all particular fact is understandable as illustrating the general principles of its status among other particular facts. It fulfills its function when understanding has been gained. Its sole satisfaction is that experience has been understood. . . . It is its own dominant interest, and is not deflected by motives derived from other dominant interests which it may be promoting. This is the speculative Reason.[1]

Whitehead admits, however, that speculative reason does perform the useful purpose of making life 'better'. That understanding for its own sake is one of the ultimate elements in the good life seems to him to be a moral intuition. Speculative reason in this sense is an urge from the good life to the better life. "But the progress which it seeks is always the progress of a better understanding. This is the urge of disinterested curiosity. In this function Reason serves only itself."[2]

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[1] *Op. cit.*, pp. 29-30.

[2] *Ibid.*, p. 30.

In Process and Reality Whitehead makes equally striking affirmations of faith.

> That we fail to find in experience any elements intrinsically incapable of exhibition as examples of general theory, is the hope of rationalism. This hope is not a metaphysical premise. It is the faith which forms the motive of the pursuit of all sciences alike, including metaphysics. The preservation of such faith must depend on an ultimate moral intuition into the nature of intellectual action--that it should embody the adventure of hope... But in itself the faith does not embody a premise from which the theory starts; it is an ideal which is seeking satisfaction. In so far as we believe that doctrine, we are rationalists.[1]

Whitehead expressly states that this faith in reason is not a metaphysical premise. It is a presupposition and in our sense is 'non-categorial'. My only comment at the present is that an adequate account of the nature of things should provide some justification for holding this faith. Within the framework of the scheme there should be no unexplained 'blind faith'. This is a point we expect to investigate in detail.

But aside from affirmations of faith Whitehead makes a few very definite 'non-categorial' assertions about the power of thought. In Process and Reality there is the startling pronouncement: "There is no first principle which is in itself unknowable, not to be captured by a flash of insight."[2] In The Function of Reason there are fragments of a similar nature. The power of going for the penetrating idea constitutes the progressive force of Reason, and he remarks that the great Greeks had this knack to an uncanny degree.[1] In regard to this same penetrative force he remarks that the function of speculative reason is "to pierce into the general reasons beyond limited reasons, to understand all methods as coordinated in a nature of things only to be grasped by transcending all method."[2]

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[1] Op. cit., p. 67.

[2] Ibid., p. 6.

But while speaking of the power of reason without begging the question by an appeal to faith, Whitehead has his moments of pessimism. The infinite ideal is never to be attained by the bounded intelligence of mankind. But the disturbing element of the flight after the unattainable, which is present in the natures of some men, is what distinguishes men from the animals and some humans from other humans.[3]

As we have noted, Whitehead thinks the Greeks to have been particularly successful. His own philosophy is based on that of Plato and he has remarked that the safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato. But when he says this he adds, which unfortunately is often

[1] Cf. op. cit., p. 36.

[2] Ibid., p. 51.

[3] Cf. ibid., p. 51.

overlooked, "I do not mean the systematic scheme of thought which scholars have doubtfully extracted from his writings. I allude to the wealth of general ideas scattered through them."[1]

Thus Whitehead believes in the power of speculation to grasp in a measure the inner nature of things and he points to the insights of the Greeks, as examples of what it is able to do. It might be added that as always, Whitehead insists that these insights or intuitions, or penetrating ideas be placed within a categorial scheme and finally be made to face the facts. "The basis of all authority is the supremacy of fact over thought."[2] But even as he makes this statement he continues with the idea we have in mind as the basis of our study: "Yet this contrast of fact and thought can be conceived fallaciously. For thought is a factor in the fact of experience."[3] In our thesis we propose to study this factor of thought as it arises in the totality of experience which Whitehead describes in the categorial scheme. And the problem with which we shall be concerned is whether the nature of thought as we find it there is such that it can justify the faith Whitehead expresses in it in extra-categorial terms.

[1] P.R., p. 63.

[2] Ibid., p. 64.

[3] Ibid., p. 64.

In marked contrast to the optimism of Whitehead's extra-categorial philosophy of thought is the pessimism of his non-categorial assertions about language. While he states that "there is no first principle which is in itself unknowable, not to be captured by a flash of insight," he adds, "Philosophers can never hope finally to formulate these metaphysical first principles . . . . Words and phrases must be stretched towards a generality foreign to their ordinary usage; and however such elements of language be stabilized as technicalities, they remain metaphors mutely appealing for an imaginative leap."[1] "Metaphysics is nothing but the description of the generalities which apply to all the details of practice" but "there is not even the language in which to explain them."[2] "The language of literature breaks down," he tells us, "precisely at the task of expressing in explicit form the larger generalities--the very generalities which metaphysics seeks to express."[3]

This conception on the part of Whitehead that language is elliptical, that it requires an 'imaginative leap' to understand its meaning in its relevance to immediate experience, that even after this imaginative leap is made the approach is only asymptotic, this pessimistic theory raises some interesting questions. For example, what is the relation of language to thought? We cannot enter into them in this chapter because we propose to study the nature of language and its relation to thought in terms of the categorial notions. Such discussion must come later.

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[1] P.R., p. 6.

[2] Ibid., p. 19.

[3] Ibid., p. 16.

However there is one other aspect of Whitehead's non-metaphysical philosophy of language which we may examine. This is what Professor Urban has described as Whitehead's notion that language is an extension of the "tool-making function" of intelligence.[1] Whitehead's statement is this: "Every science must devise its own instruments. The tool required for philosophy is language. Thus philosophy redesigns language in the same way that, in a physical science, pre-existing appliances are redesigned."[2]

It is obvious that such a notion has its origin in these three facts about Whitehead:

(i) His belief that thought can capture the nature of the real. (ii) His belief that language cannot express the metaphysical ideas which we have. (iii) His attempt to construct a linguistic categorial scheme which would be at least an approximate description of relaity as he conceives it.

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[1] Wilbur M. Urban, "Elements of Unintelligibility in Whitehead's Metaphysics," The Journal of Philosophy, XXXV (1938), 621.

[2] P.R., p. 16.

We shall discuss this "tool-making" theory again in the next chapter when we consider how Whitehead has used it in his revision of traditional philosophical categories. At present we merely note it to bring out the point that there is this extra-categorial philosophy of language couched in terms we have chosen to call 'extra-categorial'. Obviously, within the framework of a scheme which seeks to explain every element of experience there will be some discussion of language, or at least some implications for language. There is the real question of whether the two natures will be compatible.

SECTION V. METHOD OF PROCEDURE

As has been stated previously the hypothesis, or point of view, with which this thesis is written is that the natures of thought and of language as they are described in categorial terms differ from Whitehead's extra-categorial philosophies. Our theory is that within the framework of the scheme thought and language arise in the universe as stages of growth in high grade actual entities. Their primary function is expression, the gift of the individual to the world. Language is embodied in thought, not its tool which may be redesigned "in the same way that, in a physical science, pre-existing appliances are redesigned." Thought is a subjective process whose chief function is to aid in the satisfaction of the 'subjective-aim' of those actual entities endowed with intellectual feeling. Without the scheme speculative thought is akin to natural science; within the scheme it is akin to poetry.

The significance of any conclusions we reach will be subordinate to the fact that we have made a critical analysis of Whitehead's categorial discussion of thought and language. But our theory dictates our method of approach. Emphasis will be upon stages of growth in high-grade actual entities. Chapter II will be devoted to the categorial scheme so that we may understand its chief notions and their general metaphysical implications. Chapter III is concerned with a theory of the individual, of self, and mind. Chapter IV is devoted to thought, how thinking arises as a continuation of perception. Chapter V is a discussion of language, not as semantics or staid symbolism, but as the triumph of human ingenuity. And as much as possible the discussion will be in categorial terms. The final chapter will be an evaluation of Whitehead's metaphysical contribution with a few summary statements in justification of our hypothesis.

CHAPTER II

THE CATEGORIAL SCHEME

SECTION I. PREFATORY

This chapter hopes to accomplish three objectives, the net results of which will form the basis for our investigation of thought and language in Whitehead's scheme. First, we hope to acquaint the reader with the formal structure of the scheme. Secondly, we intend to arrive at some understanding of the reasons for the technical language of the scheme. Thirdly, we desire to impart a general idea of the chief metaphysical implications of the scheme so that we know (a) the nature of the world and (b) the character of the existents in that world in which thinking and communicating arise as adjuncts within experience.

If attention be centered upon our third objective this chapter appears to be an ambitious and pretentious undertaking. For even Whitehead admits that the summary statement of the scheme as it appears in the second chapter of Process and Reality is unintelligible apart from the rest of the book.[1] Our adventure might thus be construed to mean an exposition of Whitehead's complete metaphysics. However such is not our intention. We have in mind only the considering of the primary and essential notions which are of the most importance for his metaphysics as a whole. Other ideas of the scheme will be introduced in the body of the thesis as they become relevant to the discussion. It is obvious, of course, that all notions of the scheme do not possess the same grade of relevancy for a discussion of thought and language. By this we do not intend to convey the impression that we can abstract a theory of thought and language from the categorial scheme without taking into account each and every notion. This would be contrary to the ideal of the scheme that its fundamental notions shall not seem capable of abstraction from each other. We are saying merely that for our purposes some notions are more immediately relevant and important than others; and that in our discussion of the categorial scheme attention will be centered on these. And as should be, there will always be in mind cognizance of the penumbra of notions which form the background of the ideas which we are considering.

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[1] Cf. P.R., p. v.

This chapter is done in all humility. We shall proceed in order in the accomplishing of our three objectives: (i) Knowledge of the formal structure of the scheme. (ii) Understanding of the technical language of the scheme. (iii) A general idea of the chief metaphysical implications of the scheme.

SECTION II. THE FORMAL STRUCTURE OF THE SCHEME

From the point of logical construction the scheme consists simply of four sets of categories:

I. The Category of the Ultimate.

II. Categories of Existence, of which there are eight.

III. Categories of Explanation, twenty-seven.

IV. Categoreal Obligations, nine.

Of the four sets Whitehead hopes that collectively they are applicable and adequate for the interpretation of all phases of experience. He delineates their respective realms thus:

> Every entity should be a specific instance of one category of existence, every explanation should be a specific instance of categories of explanation, and every obligation should be a specific instance of categoreal obligations. The category of the Ultimate expresses the general principle presupposed in the three more special categories.[1]

We shall examine these categories as to content in a later section of this chapter. Now we are dealing with the structure of the scheme as a whole and so must let questions about particular categories wait. The first two sets of categories are sets of terms, differing in language from traditional concepts, but approximating in intent the Aristotelian categories which seek to express the different ways in which things can be, or the different kinds into which reality can be classified.[1] However we must bear in mind that this is an exceedingly rough analogy based on form and the intention to depict reality rather than a similarity in the description of reality. The unit class category of the Ultimate corresponds roughly to Aristotle's substance and the eight categories of existence are intended to cover all possible forms of being.

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[1] *Ibid.*, p. 31.

If we recall that "philosophy is descriptive generalization" and that "metaphysical categories are tentative formulations of the ultimate generalities" it becomes immediately obvious that these categories are not legislated by the mind. The Aristotelian conception of the nature of categories which Whitehead adopts is diametrically opposed to the Kantian notion of moulds into which all possible experience is cast.

The categories of explanation and the categorial obligations are sets of general propositions which serve to elucidate the meanings of the terms given in the first two sets of categories. These propositions also show how the existents are so structured into a whole as to form an orderly and organic universe. It is difficult to draw a sharp distinction between the twenty-seven categories of explanation and the nine categorial obligations. However it appears that the categories of explanation serve mainly to define and expand the notion of an entity while the categorial obligations prescribe certain conditions to which all experience must conform.[1] While at first it is puzzling to see why explanatory propositions are called "categories" reflection shows us that no great harm has been done. In fact, we perceive that by the inclusion of propositions as categories Whitehead has not only reintroduced but also broadened categoriology (German "*Kategorienlehre*") as an important philosophic science. The traditional interpretation of categoriology is that it is a technique derivative of ontology. Ontology is the science of being or of existing things. Categoriology in the Aristotelian sense is the conscious attempt at a formulation of verbal concepts adequate for the classification of the various forms of existence. Whitehead has extended the science of categoriology so that now it is a technique of cosmology as well as of ontology. Cosmology is the branch of metaphysics which treats of the character of the universe as an orderly system, or cosmos. Whitehead's categories of explanation and of obligation show the nature of actual entities and the chief relations which exist between them.

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[1] Cf. Aristotle Metaphysica 1017a, in The Works of Aristotle translated into English, ed. J. A. Smith and W. D. Ross (Oxford: Clarendon Press, 1908), VIII.

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[1] Cf. Dorothy M. Emmet, *Whitehead's* *Philosophy* of *Organism*. (London: Macmillan and Company, 1932) pp. 70-71.

The net result of these propositions is a picture of a universe characterized by order and coherence.

The categorial scheme thus is simply a fusion of ontology and cosmology. The inclusion of propositions as categories within the categorial scheme meliorates the mechanical aspect ontological categories display when they are merely arranged in a list as in Aristotle. One gets the "feel" of the organic nature of existence by reading Whitehead's categorial scheme. Apparently this is so because a frame of reference gives a better definition of the ontological ideas. The compactness of the scheme is due to the fact that while there is the desire to know as much as possible of the ultimate nature of the universe there is also the attempt to embrace all the known characteristics in the smallest possible number of general concepts and general propositions about those concepts. This conciseness of the scheme reflects Whitehead's desire to make the system amenable to deduction. However the scheme is so loosely stated that it should by no means be construed to be a strictly logical matrix with defined and undefined terms, axioms, and postulates. We may say that in a general way, the formal structure of the scheme supports Whitehead's three reasons for maintaining it to be the proper method of philosophical construction. There is a better definition of ideas and of particular propositions. There is some possibility of deduction if we bear in mind that one of the functions of deduction is to lead to new ideas. And the scheme does reflect a coherent universe for the categories themselves are mutually dependent.

SECTION III. THE LANGUAGE OF THE SCHEME

Categoriology as a philosophic science is significant of a highly reflective activity and may involve constructed principles of interpretation which differ radically from the concepts of everyday thought. Philosophic categories are universal traits generic to all existence. Generic characters of existence like individuality, universality, relation, time space, cause, and value pertain to characteristics of objects which are essential to the very existence of the objects. When we reach the philosophic level of inquiry we have transcended in some measure the ordinary usage of words like one, some, many. Even when we do use the same linguistic symbols, as space, time, and value, we attach to them a deeper significance. By 'time' we mean more than simply what o'clock it is. By 'space' we have in mind more than the distance in city blocks from my home to the campus. By "value" we mean more than the cash price of a meal. Yet in philosophic usage there is that undercurrent of meaning applicable to the everyday usage of the concepts. Philosophy has broadened them, deepened them, made them applicable to realms of experience far beyond the life of the student who glances at the clock, walks two blocks to the classroom, wonders what is the value of it all. The nomenclature of philosophy is technical. God, mind, matter, may mean entirely different things to the philosopher than to one of the laity.

All philosophers claim the right to couch their statements in technical terms because they want to say more than what is usually said in everyday speech. Whitehead insists upon the general inadequacy of the common language. "The language of literature breaks down," he tells us, "precisely at the task of expressing in explicit form the larger generalities--the very generalities which metaphysics seeks to express. Metaphysics deals with those notions that are relevant to the most general aspects of experience. Ordinary language was however made to deal with particulars."[1] At this point Whitehead is simply reiterating a common truth that certain difficulties in philosophical language are inevitable. We must expect a certain initial linguistic difficulty in any work of the deeper sort, whether it be philosophical or a treatise in the special sciences. However as we have already pointed out in Section V of Chapter I, Whitehead's pessimism concerning the adequacy of language goes even deeper. "Words and phrases must be stretched towards a generality foreign

[1] Cf. P.R., pp. 16-17.

to their usage; and however such elements of language be stabilized as technicalities, they remain metaphors mutely appealing for an imaginative leap."

This distrust in the technical language of philosophy sets Whitehead apart from other philosophers who merely deplore the inadequacy of common speech. "The technical language of philosophy," he writes in Process and Reality, "represents attempts of various schools of thought to obtain explicit expression of general ideas presupposed by the facts of experience."[1] And it seems that he continues the paragraph in The Adventures of Ideas: "But the claim that (philosophy) has acquired a set of technical terms sufficient for its purposes, and exhaustive of its meanings, is entirely unfounded."[2] Now Whitehead expressly states in the preface of Process and Reality two chief reasons why he distrusts the technical language of philosophy. But his substantiation of these premises must be sought in analysis. He remarks that his lectures will be best understood if it is noted that he repudiates, in so far as concerns their influence on philosophy, nine prevalent habits of thought. Of this list we are concerned with the two which express his repudiation of language. He renounces "the trust in language as an adequate expression of propositions" and he disclaims "the subject-predicate form of expression."[1] An analysis of these repudiations plus the recall of his 'tool-making theory' of language should provide an excellent basis for an understanding of Whitehead's own especially created terms.

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[1] Op. cit., p. 18.

[2] Op. cit., p. 294.

Whitehead's belief that language is not an adequate expression of propositions boils down to this: (i) that a proposition exists as a peculiar kind of entity, a hybrid between pure potentialities and actualities.[2] (ii) That propositions are "the tales that perhaps might be told about particular actualities." These tales must be true or false.[3] (iii) That every proposition refers to a universe exhibiting some general systematic metaphysical character.[4] Within this universe the proposition achieves a measure of particularity when it characterizes a set of actual entities in their definite relationships with each other.[5] (iv) That a distinction must be made between verbal phrases and propositions.[6] For the same verbal phrase or linguistic sentence may refer to an indefinite

[1] Cf. op. cit., p. viii.

[2] Cf. ibid., p. 282.

[3] Cf. ibid., p. 392.

[4] Cf. ibid., p. 16.

[5] Cf. ibid., pp. 295-97.

[6] Cf. ibid., p. 17.

number of propositions, each of which refers to a different background. "For example, the word 'Socrates', referring to the philosopher, in one sentence may stand for an entity presupposing a more closely defined background than the word 'Socrates' with the same reference, in another sentence. The word 'mortal' affords an analogous possibility."[1] (v) That in the light of the above four points a language precise enough to adequately express the meaning of particular propositions "must await a completed metaphysical knowledge."[2] Thus Whitehead repudiates the trust in language as an adequate expression of propositions because in his opinion no one has as yet achieved a "complete metaphysical knowledge." He hopes however, that his scheme will approach this ideal.

Our discussion of Whitehead's conception of propositions has been sketchy but in a measure complete. He complicates the issue himself by using the terms 'proposition', 'sentence', and 'verbal phrase' interchangeably when obviously by his own definition a proposition is a definite kind of existent distinct from the linguistic attempts to express it. However since we know what he ought to say when he relapses into ordinary usage of the word proposition we may quote a passage from The Function of Reason which carries the same point brought out above:

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[1] *Ibid*., p. 18.

[2] *Ibid*., p. 18.

"Apart from a complete metaphysical understanding of the universe, it is very difficult to understand any proposition clearly and distinctly, so far as concerns the analysis of its component elements."[1] What he has in mind here is probably what he means by a sentence, not by the term 'proposition' which he maintains that sentences cannot properly express. But the point is the same, that a precise language awaits a complete metaphysical understanding of the universe. We must know all possible propositions expressible by a single sentence if we are to be sure that we are entertaining the correct one.

We might point out here that what Whitehead calls a proposition, that hybrid kind of entity midway between a universal and a particular, is parallel to what Dewey means by 'meaning'. According to Whitehead propositions may be broadly defined as "lures for feeling."[2] "In the real world it is more important that a proposition be interesting than that it be true."[3] And as already quoted, propositions are tales which might be told about particular actualities; Now specifically, to carry our point let us note Whitehead's analysis of the sentence, 'Caesar has crossed the Rubican.' "This form of words," he says, "symbolizes an indefinite number of diverse propositions."[1] Whitehead then elucidates several meanings or rather several propositions according to his use of the term. The propositions are explained in his technical terminology which we have not as yet explored but we may render them simply thus: (i) The proposition we entertain which refers to a certain event of history. (ii) The proposition one of Caesar's old soldiers may have had in mind as he sat on the bank of the river and meditated on the assassination of Caesar. (iii) The proposition meditated upon by a modern traveller sitting on the bank of the river. (iv) The proposition which might have been in the mind of one of the crowd who listened to Antony's speech, a man who had seen Caesar and not the Rubicon. Whitehead then points out that in this way an indefinite number of highly special propositions can be produced, differing from each other by fine gradations. He concludes by stating that the discussion "should show the futility of taking any verbal statement, such as 'Caesar has crossed the Rubicon,' and arguing about the meaning. Also any proposition, which satisfies the verbal form so as to be one of its possibilities of meaning, defines its own locus of subjects."[1]

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[1] Op. cit., p. 54.

[2] Ibid., p. 281, p. 395.

[3] Ibid., p. 396; cf. A.I. p. 313.

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[1] P.R., p. 297.

It may be unnecessary to point out here that by 'subjects' Whitehead does not mean the grammatical substantives of a sentence but the actual entities or things which exist in the realm in which the proposition may find some application.[2] Since this is so

> . . . new propositions come into being with the creative advance of the world. For every proposition involves its logical subjects; and it cannot be the proposition which it is, unless those logical subjects are the actual entities which they are. Thus no actual entity can feel a proposition, if its actual world does not include the logical subjects of that proposition. The proposition 'Caesar crossed the Rubicon' could not be felt by Hannibal in any occasion of his existence on earth. Hannibal could feel propositions with certain analogies to this proposition, but not this proposition.[3]

It seems clear now that what Whitehead means by 'proposition' may be a particular meaning of a given sentence. However the proposition has an existential status and has being whether there are ever any sentences formulated about it or not. This seems to me to be analogous to Dewey's use of the term meaning.[4] Dewey writes:

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[1] *Ibid*., p. 299.

[2] Cf. *ibid*., p. 295.

[3] *Ibid*., p. 396.

[4] John Dewey, *Experience and Nature* (Chicago: Open Court Publishing Company, 1925), ch. viii and *passim*.

> The same existential events are capable of an infinite number of meanings. Thus an existence identified as "paper", because the meaning uppermost at the moment is "something to be written upon", has as many other explicit meanings as it has important consequences recognized in the various connective interactions into which it enters. Since possibilities of conjunction are endless, and since the consequences of any of them may at some time be significant, its potential meanings are endless. It signifies something to start a fire with; something like snow; made of wood-pulp; manufactured for profit . . . . There is no conceivable universe of discourse in which the thing may not figure, having in each its own characteristic meaning.[1]

The similarity between possible meanings of existences and tales which perhaps might be told about entities seems apparent. However in Dewey there is the pragmatic emphasis upon 'important consequences'. Also while giving existence to meaning Dewey is inclined to limit it to human experience and, as im the passage quoted above, even to universes of discourse. Furthermore Dewey makes a rather broad generalization when he says that there is no conceivable universe of discourse in which the thing, say paper, could not figure and have its own characteristic meaning. Whitehead would point out that before the civilization of ancient China there were no tales to be told about paper. The Egyptian scratching his clay tablets might have entertained a similar proposition but not a proposition about paper. However this was intended only as an excursion and should not be considered as a strict comparison.

One final similarity compells attention. Whitehead, as we remember, says that it is more important that a proposition be interesting than that it be true. Dewey writes:

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[1] *Ibid*., pp. 320-21.

> The realm of meanings is wider than that of true-and-false meanings; it is more urgent and more fertile . . . . Poetic meanings, moral meanings, a large part of the goods of life are matters of richness and freedom of meanings, rather than of truth; a large part of our life is carried on in a realm of meanings to which truth and falsity as such are irrelevant.[1]

We see that in our investigation of Whitehead's distrust of language as an adequate expression of propositions we have been introduced already to one of his categories of existence, the propositions, "or matters of Fact in Potential Determination, or Impure Potentials for the Specific Determination of Matters of Fact or Theories." And as he has defined them there is some justification for holding that one verbal phrase cannot adequately express an indefinite number of meanings or propositions.

Whitehead's distrust of the subject-predicate form of expression is based not so much upon a criticism of language as it is upon a certain kind of philosophy which invariably expresses itself in subject-predicate categories. However since he considers the philosophy to be the inevitable product of the subject-predicate language it may be interpreted that language is at fault. We should bear in mind however that there is this dual aspect of the criticism of a certain kind of philosophy as well as of language. "All modern philosophy," Whitehead tells us, "hinges round the difficulty of describing the world in terms of subject and predicate, substance and quality, particular and universal. The result always does violence to immediate experience."[1] "The disease of philosophy is its itch to express itself in the forms, 'Some S is P,' or 'All S is P.'"[2] According to him "this language expresses a useful abstract for many purposes of life. But whenever we try to use it as a fundamental statement of the nature of things, it proves itself mistaken . . . For its employment in language and logic there is--as stated above--a sound pragmatic defense. But in metaphysics the concept is sheer error."[3]

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[1] *Ibid.*, pp. 410-11.

Whitehead has two chief reasons for this critical attitude. First, he believes that the subject-predicate language cannot express the true nature of a given thing or actual entity but it is highly abstract. "In the philosophy of organism a subject-predicate proposition is considered as expressing a high abstraction."[4] To describe things in subject-predicate language is pragmatically indispensable for ordinary discourse. We say "The rose is red," "The stone is grey" and convey meaning. However these are abstractions when viewed in the light of metaphysical analysis. The error occurs when we refuse to admit their abstractness and maintain that such statements convey truths which are metaphysically ultimate. According to a metaphysics based on this view, an individual substance with its predicates constitutes the ultimate type of actuality. By the employment of the notion of an individual substance in a metaphysical sense is meant an actual entity or thing which is characterized by essential qualities, and remains numerically one amidst the changes of accidental relations and of accidental qualities.[1] We see thus that Whitehead's criticism of the subject-predicate language is actually a criticism of the doctrine of substance. The true nature of things, as we shall see, is not expressible in the morphology of a stuff but in that of activity, experience and process. But we must leave this now and consider the second reason why Whitehead distrusts the subject-predicate proposition.

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[1] P.R., p. 78.

[2] M.T., p. 194.

[3] P.R., p. 122.

[4] Ibid., p. 209.

Whitehead denies the subject-predicate language because it is unable to adequately express the relations which exist between things. This however is more than a mere denial of the adequacy of Aristotelian logic which is the highest development of the subject-predicate form of expression. The substitution of modern symbolic logic for Aristotelian logic in the statement of metaphysical propositions would meliorate the difficulty but would not solve it. For fundamentally Whitehead is criticizing the philosophy behind the subject-predicate language, not merely the language *per se*. He is again attacking substance. The difficulty with Aristotle's doctrines of Predication and of Primary Substance, says Whitehead, is that they leave out of account the interconnections between real things.

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[1] Cf. *ibid*., p. 122; pp. 208-209.

> Each substantial thing is thus conceived as complete in itself, without any reference to any other substantial thing. Such an account of the ultimate atoms, or of the ultimate monads, or of the ultimate subjects enjoying experience, renders an interconnected world of real individuals unintelligible. The universe is shivered into a multitude of disconnected substantial things, each thing in its own way exemplifying its private bundle of abstract characters which have found a common home in its own substantial individuality. But substantial thing cannot call unto substantial thing. A substantial thing can acquire a quality, a credit--but real landed estate, never. In this way Aristotle's doctrines of Predication and of Primary Substance have issued into a doctrine of the conjunction of attributes and of the disjunction of primary substances.[1]

We need only to recall that the scheme is designed to describe the obvious solidarity of the world to get the full import of Whitehead's criticism of the inability of subject-predicate categories to express this real connectedness. Whitehead subscribes to the doctrine of internal relations in which actual entities function both as subjects and as predicates.[2] For one actual entity to be a predicate in another actual entity is the objectification of the former for the latter.[1] All of these notions however, will be explained more fully as we proceed with our study.

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[1] *A.I.*, pp. 169-70.

[2] See *P.R.*, p. 295, and *passim*.

At the present we can recapitulate the chief grievances against language which led Whitehead to attempt a formulation of his own technical terminology. First there was the general distrust of everyday language which is shared by most philosophers. Secondly, there was the distrust in language as an adequate expression of propositions. This led us into an analysis of Whitehead's metaphysical theory of the nature of propositions which we likened to Dewey's theory of meaning. Thirdly, we examined Whitehead's objection to subject-predicate language and found that the objection fundamentally was aimed at the underlying philosophy of substance. However, the linguistic difficulties were expressed, (a) as the inability of the subject-predicate categories to describe the true nature of a thing, and (b) the inability of Aristotelian language to account for the fundamental relations existing between things. Thus we have some intimations of what Whitehead had in mind when he began constructing his own nomenclature.

In the next section we proceed with a direct analysis of the philosophic notions. But before we tackle the ideas

[1] Cf. *ibid.*, the twenty-fourth category of explanation.

themselves a thought taken from Berkeley[1] seems peculiarly apropos.

> Philonous. I am not for imposing any sense on your words: you are at liberty to explain them as you please. Only, I beseech you, make me understand something by them.

SECTION IV. THE CATEGORY OF THE ULTIMATE

"In all philosophic theory," says Whitehead, "there is an ultimate which is actual in virtue of its accidents. It is only then capable of characterization through its accidental embodiments, and apart from these accidents is devoid of actuality. In the philosophy of organism this ultimate is termed creativity."[2] This ultimate category of philosophy is a description, or at least a naming of, the factor of the 'simply given' or 'brute fact' we encounter in the real world. The ultimate category is a concession to the presence in nature of an element we cannot wholly account for or explain. It is over and above law, merely given, a surd or an irrational. It is the business of science and philosophy never to acquiesce into a state of complete contentment with this ultimate irrationality. But however we try, we end with

[1] The First Dialogue between Hylas and Philonous.

[2] P.R., pp. 10-11.

something metaphysically ultimate. This ultimate irrationality is what Whitehead means by creativity.[1]

Within the frame work of the categorial scheme 'creativity' becomes another rendering of the Aristotelian 'primary matter', and of the modern 'neutral stuff.' However Whitehead divests it of the notion of passive receptivity, either of 'form' or of external relations. Creativity is the pure notion of activity. It is the ultimate notion of the highest generality at the base of actuality.[2]

There is a subtlety of meaning attached to the term 'creativity' which superficial readers often miss. Of the superficial readers there are two types: those who seek an explanation of a doctrine by looking into the past and those who seek the foundations of theories in the analogues of contemporary science. The first group contends that Whitehead's creativity is an alternative rendering of Spinoza's doctrine of a fundamental substrate of which all things are modes.[3] The other group believes that creativity is the philosphic rendering of the physicist's concept of energy. On either of these false analyses one is incorrect in drawing the inference that Whitehead has not denied substance but has merely introduced it under a new name. It is true that Spinoza's substrate is what we mean by an enduring underlying substance. And Planck's hypothesis of discrete and disembodied quanta of energy affirms action without specifying anything to act, unless the word "energy" is given all the physical attributes of matter. A quantity of radiant energy thus seems to be a corpuscle of light which is after all a category of substance. But Whitehead means by creativity neither Spinoza's substance nor the physicist's quanta of energy--though as we shall see he does have a concept, the actual entity, which corresponds to a quantum of energy. "Creativity is the universal of universals characterizing ultimate matter of fact."[1] Whitehead's philosophy is a pluralism of actual entities and without these actual things creativity is non-existent. Creativity is an adjective, not a substantive, and it implies both the action and the novelty inherent in the processes of the individual things of the world. "The creativity is not an external agency with its own ulterior purposes."[2] The category of the ultimate expresses the

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[1] Cf. A. E. Taylor, Plato, The Man and His Work (New York: Lincoln Mac Veagh, 1927), summary of the Timaeus for this notion of "the given." Whitehead quotes Professor Taylor in P.R., pp. 67-68.

[2] Cf. P.R., pp. 46-47 and passim.

[3] See David Bidney, "The Problem of Substance in Spinoza and Whitehead," The Philosphical Review, XLV (1936), 574-92. Also see A. H. Johnson, "A Criticism of D. Bidney's Spinoza and Whitehead," The Philosophical Review, XLVII (1938), 410-14. Mr. Bidney incorrectly relates Whitehead's creativity to Spinoza's substance and Mr. Johnson points out that he is in error.

[1] P.R., p. 31.

[2] Ibid., p. 339.

general principle presupposed in the three more special categories, that the world is a process and that this process is characterized by a creative advance into novelty.

SECTION V. THE CATEGORIES OF EXISTENCE

There are eight categories of existence.[1] An examination of these categories shows that Whitehead uses the term 'existence' in its most complete and widest sense. It is a blanket usage which covers any possible type of being. It is synonymous with the existence ascribed to spatio-temporal objects; the instances of consciousness like pains and pleasures and all remembered experiences and mental discourse; and the subsistence given to Platonic ideas or universals. There is no particular objection to Whitehead's lumping together of his categories in this ambiguous way for in the explanation of each of the eight categories he is careful always to designate whether the existence in question is in the spatio-temporal realm of actuality or the subsistence realm which he objectifies by naming the realm of pure Potentiality. "Among these eight categories of existence," writes Whitehead, "actual entities and eternal objects stand out with a certain

[1] See *ibid.*, pp. 32-33 for complete list.

extreme finality. The other types of existence have a certain intermediate character."[1]

In Modes of Thought,[2] Whitehead brings out the point that we cannot exhaust the various types of existence "because there are an unending number of them." "But we can start with two types which seem to us as extremes," he continues, "and can then discern these types as requiring other types to express their mutual relevance to each other." Whitehead then respectively names the two types in question, The Type of Actuality, and the Type of pure Potentiality. He closes the particular chapter in which this discussion is found by briefly characterizing these two types of existence. "There are two ultimate types of existence implicated in the creative process, the eternal forms with their dual existence in potential existence and in realized fact, and realized fact with its dual ways of existence as the past in the present and as the immediacy of the present. Also the immediacy of the present harbours an appetition towards the unrealized future."[3]

We see then that our attention may be centered upon the two chief categories, the actual entities and the eternal objects. A useful corollary is that of the

[1] Ibid., p. 33.

[2] Cf. op. cit., pp. 95-96.

[3] Ibid., p. 116.

remaining six intermediate types of existence some may be grouped with the actual entities in the realm of actuality and others may be placed with the eternal objects in the realm of potentiality. This depends of course on the degree to which they approach the one or the other. Thus prehensions and nexūs are obviously in the realm of actuality. Subjective forms and contrasts are elements in the conscious experience of high grade actual entities and because of their inherent particularity may also be said to be actual though not to the same degree as actual entities, prehensions, and nexūs. Propositions, which we have already discussed, obviously may be grouped with the eternal objects as being potentials. Multiplicities too are placed in the realm of pure potentiality, though as we shall see they are of no deep metaphysical importance. However all the intermediate types are of an indeterminate sort and should be remembered as such.

"The ultimate facts of immediate actual experience," says Whitehead, "Are actual entities, prehensions, and nexūs. All else is, for our experience, derivative abstraction."[1] Actual entities or actual occasions are the final real things of which the universe is made up. There is no goining behind actual entities to find anything more real. They are the final, ultimate metaphysical facts. Actual entities are drops of experience, complex and interdependent. The notion of 'substance' is transformed into that of "actual entity'.[1] Actual entities involve each other by reason of their prehensions of each other. A prehension is only a subordinate element in an actual entity but it is referent to an external world. Prehensions, and nexūs are alike real, individual and particular. But obviously the actual entity is the basic category.

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[1] *P.R.*, p. 30.

These notions of course will be further clarified as we proceed with the categories of explanation and of obligation. At present our objective is to introduce them with suggestions of their meaning. Here it might be well to note the relationship existing between Whitehead's 'event' and the 'actual occasion'. He states:

> The actual world is built up of actual occasions; and whatever things there are in any sense of 'existence' are derived by abstraction from actual occasions. I shall use the term 'event' in the more general sense of a nexus of actual occasions, interrelated in some determinate fashion (by prehensions) in one extensive quantum. An actual occasion is the limiting type of an event with only one member.[2]

Subjective Forms, or Private Matters of Fact and Contrasts, or Modes of Synthesis of Entities in one Prehension are categories applying to the conscious and intellectual experiences of the high-grade actual entities. They are placed in the realm of actuality solely because they are qualifications of prehensions. A prehension may be likened to an intuition and the subjective form may be likened to the subject's emotional reaction to the datum intuited. The subjective form is how the subject prehends the datum. In the higher grade actual entities all instances of consciousness, like pains and pleasures and all remembered experiences are prehensions. Each of these has its subjective form, or private matter of fact, which is its emotional valuation by the subject entertaining the prehensions. Contrasts are more complex. They are valuations by the subject of several other entities in one prehension; as I now prehend both yellowness and whiteness in the two sheets of paper before me and recognize that there is a difference. Or I prehend the red book before me and think that it might as well have been blue. However this category as well as that of subjective forms will be referred to later and so we may leave them now. Of the categories of Existence we have now examined Actual entities, Prehensions, Nexūs, Subjective Forms and Contrasts. These we stated comprise the realm of actuality. Next we shall examine briefly the realm of the potential. These investigations are necessarily sketchy for we are trying to encompass the scope of Whitehead's philosophy as a propadeutic to the particular problem of our enquiry, the nature of thought and language within the philosophy.

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[1] Cf. ibid., pp. 27-28.

[2] Ibid., p. 113.

Whitehead's 'eternal objects' are Platonic forms masquerading under poetic symbolism. According to Professor Parker's excellent analysis of the various theories about universals, Platonism is the doctrine that universals and particulars are coordinate, but separate in reality.[1] Universals exist separate from particulars and ingress into particulars from some alien realm of essence or of potentiality. This is the position of Whitehead with but one exception. But we shall not point out this exception until we discuss the ontological principle in the following section of this chapter. Let us see what Whitehead says himself.

> The train of thought in these lectures is Platonic . . . We have set about the construction of a philosophy of organism. In such a philosophy the actualities constituting the process of the world are conceived as exemplifying the ingression (or 'participation') of other things which constitute the potentialities of definiteness for any actual existence. The things which are temporal arise by their participation in the things which are eternal. The two sets are mediated by a thing which combines the actuality of what is temporal with the timelessness of what is potential. This final entity is the divine element in the world, by which the barren inefficient disjunction of abstract potentialities obtains primordially the efficient conjunction of ideal realization. This ideal realization of potentialities in a primordial actual entity constitutes the metaphysical stability whereby the actual process exemplifies general principles of metaphysics, and attains the ends proper to specific types of emergent order.[2]

[1] D. H. Parker, Experience and Substance, (Ann Arbor: University of Michigan Press, 1941), ch. iv.

[2] Cf. P.R., pp. 63-64.

In this passage there is an introduction to Whitehead's God. It should be remembered that the eternal objects exist in the primordial nature of God--God having two natures--a 'consequent' one as well. God thus is not only the source of the eternal objects but in virtue of his consequent nature he becomes the ordering and regulating force by means of which the potential and the actual are combined. A complete examination of the God in Whitehead's system is an interesting bypath which tempts exploration. However the discussion is not entirely relevant to our thesis and we shall make explanatory references only when necessary. We refer the reader to Moxley's article[1] with which we are in substantial agreement.

A few more remarks about the eternal objects should establish firmly our contention that Whitehead is a Platonist. "An eternal object," he writes, "is always a potentiality for actual entities; but in itself, as conceptually felt, it is neutral as to the fact of its physical ingression in any particular actual entity of the temporal world."[2] The eternal objects are the same for all actual entities.[3] Occasionally Whitehead makes a direct reference to Plato:

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[1] D. J. Moxley, "The Conception of God in The Philosophy of Whitehead," Aristotelian Society Proceedings, n.s. XXXIV (1933-1934), pp. 157-86.

[2] P. R., p. 70.

[3] Ibid., p. 34.

"The eternal objects as in God's primordial nature, constitute the Platonic world of Ideas."[1] However he reminds us that the term 'Platonic form' is used merely because it is the briefest way of indicating the nature of the entities in question. He contends that his lectures "are not an exegesis of Plato's writing; the entities in question are not necessarily restricted to those he would recognize as 'forms'."[2] But no matter how far he extends the range of the eternal object, he is by our definition a Platonist. His eternal objects and actual entities are separate in reality. We shall mention the eternal objects again in our discussion of the ontological principle, which as we have said, constitutes one exception to our contention that Whitehead is a Platonist.

Propositions, *or* matters of Fact in Potential Determination, *or* Impure Potentials for the Specific Determination of Matters of Fact, *or* Theories obviously belong in the realm of potentiality. However, we have already discussed them in Section III of this chapter.

There remains only one more category of potentiality, which incidentally, completes the list of eight categories of existence. We shall close this section, then, with a brief discussion of Multiplicities, *or* Pure Disjunctions of

[1] *Ibid.*, p. 73.

[2] Cf. *ibid.*, pp. 69-70.

Diverse entities. As explained in the sixteenth category of explanation a 'multiplicity' consists of many entities, and its unity is constituted by the fact that all its constituent entities severally satisfy at least one condition which no other entity satisfies. The criteria for determining a particular multiplicity are to be found in the statements which can be expressed about it. Every true statement about a particular multiplicity can be rendered as a statement referent either (a) to all its members severally, or (b) to an indefinite some of its members severally, or (c) as a denial of one of these statements.[1]

Reflection and analysis shows that the definition of a multiplicity corresponds exactly to that of a class when the class is defined in terms of the extension of a propositional function or of a concept. We may recall that in *Principia Mathematica* the authors were loath to make the assumption that classes exist though they did wish to provide a notation to represent them.[2] Whitehead uses the category of multiplicity, allows it to perform the same formal or logical functions that the concept of class performs, but by the use of a new name leaves himself the freedom to purge his concept of the undesirable connotations often associated with classes. Thus in his metaphysics he undercuts the ontological presuppositions about classes which he deplored in his logic but which was not in that work his business to investigate.

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[1] Cf. *ibid.*, p. 36.

[2] Cf. *op. cit.*, *20. Also see *20.03 for logical definition of a class: $Cls = \hat{\alpha}\{(\exists\phi) . \alpha = \hat{z}(\phi ! z)\}$ Df.

There are three notions about classes which Whitehead repudiates. These repudiations constitute his reasons for the adoption of the term multiplicity. The first notion he attributes to Locke, Hume and the followers of Hume. According to this class theory the essence of a class is that the members of its extension have no diversity of function. The class is a whole and reacts as a whole.[1] According to Whitehead's metaphysical position this is patently wrong. There can be no such thing as a class defined in this way because actual entities are always particular and objectively diverse. Indeed one of the categorial obligations is called the Category of Objective Diversity. This asserts that there can be no coalescence of diverse elements so that they exercise an absolute identity of function. Furthermore he contends that even in the concept of class itself there is a contradiction of the notion that the members can exercise an absolute identity of function. For the members of the class are diverse in virtue of mere logical disjunction. The class of books on this table consists of this book and that book, and that book, and so until the enumeration is complete. Thus upon analysis what was appealed to as a "class" proves to be a mere multiplicity--a collection of entities inherently diverse and exercising diversities of function.

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[1] Cf. P.R., p. 348. He refers to Locke's Essay Concerning Human Understanding II, XXIII, 1; and Hume's Treatise Part I, Sect. 6.

"In the prevalent discussion of classes," writes Whitehead, "there are illegitimate transitions to the notions of a 'nexus' and of a 'proposition'."[1] This is the second notion, closely related to the first, which Whitehead repudiates about classes. He disposes of the belief with one pithy statement. "The appeal to a class to perform the services of a proper entity is exactly analogous to an appeal to an imaginary terrier to kill a real rat."[2]

The final notion Whitehead discards about classes is not explicitly stated but seems to be implied in a discussion of one particular multiplicity--the multiplicity of eternal objects.

> There is not, however, one entity which is merely the *class* of all eternal objects. For if we conceive any class of eternal objects there are additional eternal objects which presuppose that class but do not belong to it. For this reason, the phrase 'the multiplicity of Platonic forms' is used, instead of the more natural phrase the 'class of Platonic forms'. A multiplicity is a type of complex thing which has the unity derivative from some qualification which

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[1] *Ibid.*, *loc. cit.* Whitehead makes no reference to anyone in this passage. However the view he mentions, namely, the belief that classes have some sort of existence and unity in nature like nexus or propositions (hybrid universals), is apparently held by G. F. Stout in his *Studies in Philosophy and Psychology* (London: Macmillan and Company, 1930).

[2] *P.R.*, p. 348.

participates in each of its components severally; but a multiplicity has no unity derivative merely from its various components.[1]

The point Whitehead makes is a subtle one. If the eternal objects form a class, and the class is a thing, then there must be at least one other eternal object which presupposes that thing. Therefore the class of eternal objects would not include all eternal objects. This of course is another rendering of Russell's paradox of the class of all classes. Whitehead solves the problem of type theory by dispensing with the notion of classes. The solution is metaphysical. Metaphysics deals with things, not abstracta, and when we wish to talk about collections of things we do so by considering multiplicities, the pure disjunctions of diverse entities. By definition there can be no point in talking about multiplicities of multiplicities.

In this one instance, because of the clarification of metaphysical thinking about classes and because of the many ingrained false notions about classes, Whitehead seems to have the right to replace the word class with the word multiplicity. However, he did not make his position clear and some writers appear to be baffled about what he could have meant by his category. Dorothy M. Emmet barely mentions the category.[1] Rasvihary Das ignores multiplicities entirely.[2] The foregoing analysis of this category is as much our own as it is Whitehead's. However we believe we have grasped the essence of what he meant.

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[1] *Ibid.*, p. 73. The italics are his.

This completes our brief examination of the eight categories of existence. These notions will be expanded and further clarified when we deal with the remaining two sets of categories.

SECTION VI. THE CATEGORIES OF EXPLANATION

There are twenty-seven Categories of Explanation, the mere statement of which takes six pages in Process and Reality. We shall confine our exposition of them to an examination of four principles which the categories collectively express: the ontological principle, the principle of Process, the Subjectivist principle, and the Relativity principle. These metaphysical principles constitute the essence of the categories of explanation. Our concentration on these principles will render the haphazard collection of explanatory propositions intelligible.

"The ontological principle can be summarized as: no actual entity, then no reason."[3] It maintains that the final ultimate realities of the world are actual entities. Outside of actual things there is no existence, "all else is, for our experience, derivative abstraction." This is the abiding realistic principle of Whitehead's philosophy: that the world is built up of concrete things. A complete statement of the principle is given in the eighteenth category of explanation.

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[1] Op. cit.

[2] The Philosophy of Whitehead (London: J. Clarke and Company, Ltd., 1938).

[3] P.R., p. 28.

> That every condition to which the process of becoming conforms in any particular instance, has its reason either in the character of some actual entity in the actual world of that concrescence, *or* in the character of the subject which is in process of concrescence. This category of explanation is termed the 'principle of efficient, and final causation'. This ontological principle means that actual entities are the only *reasons*; so that to search for a reason is to search for one or more actual entities.[1]

This point of view which maintains that actual things are the final realities of the world is thoroughly Aristotelian. It is a denial of all transcendentals. This principle verifies our contention that the ultimate category of creativity is not a fundamental substrate of which all things are modes. Actual entities are basic and creativity can be only a generic characteristic exemplified in each. But one category of existence, the eternal objects, patently affirms the existence of a multiplicity of transcendentals which ingress into temporal particulars from the mysterious realm of essence which in this case is the primordial nature of God. The yellow of this paper is the same yellowness which ingresses or participates in the paper in the adjoining carrell. The yellowness exists and the paper exists. The universal and the particular are coordinate but separate in reality. Whitehead is not an Aristotelian realist who would hold that the universal and the particular are coordinate, but yet merely distinguishable factors of a single reality, the individual paper upon which I now write. In the face of his Platonic theory of universals how can Whitehead assert the ontological principle which is thoroughly Aristotelian?

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[1] *Ibid.*, pp. 36-37.

Whitehead extricates himself from an apparently flat contradiction but the solution reduces the ontological principle to a status of dubious metaphysical importance. We are told that actual entities are the final realities and are led to believe that nothing exists outside of actual entities. "According to the ontological principle there is nothing which floats into the world from nowhere. Everything in the world is referable to some actual entity."[1] Yet we are puzzled about the eternal objects and make a query. Then we learn a surprising fact. "God is an actual entity, and so is the most trivial puff of existence in far-off empty space. But though there are gradations of importance, and diversities of function, yet in the principles which actuality exemplifies all are on the same level."[2]

[1] *Ibid.*, p. 373.

[2] *Ibid.*, p. 28.

Thus Whitehead easily maintains that "there is no going behind actual entities to find anything more real." The actual entities exist in the primordial nature of God. Since God is an actual entity there is no transcendence of the actual by the potential. Obviously there is no existence of the potential apart from the actual. Whitehead is quite aware of this particular value of his God, for after a discussion of the nature of God he states: "By this recognition of the divine element the general Aristotelian principle is maintained that, apart from things that are actual, there is nothing--nothing either in fact or in efficacy."[1]

It is obvious that while the definition of God as an actual entity saves the ontological principle it also shows that the principle has only a superficial resemblance to the Aristotelian point of view. For right here in this library carrell where I now write there are on Whitehead's view particulars and universals separate in reality but "mediated by a thing (God) which combines the actuality of what is temporal with the timelessness of what is potential." Thus it is only in a Pickwickian sense that Whitehead can assert the ontological principle. For we see that one of the most important questions, that of the existence of universals, is solved in an unsatisfactory manner. Universals do exist apart from all actual entities except one. Since they exist in that one actual entity, God, Whitehead claims to be an Aristotelian.

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[1] *Ibid*., p. 64.

While I am reluctant to criticize the logic of Whitehead it seems to be a violation of logical form to place God on the same level with other actual entities. We can simplify the issue by recalling the theory of types. On the one hand there is the class of actual entities, and on the other hand the class of eternal objects. The eternal objects exist in the primordial nature of God and God is the metaphysical stability which mediates the class of actual entities and the class of eternal objects. Now it is obviously a violation of type theory to place God in the same class with the actual entities of which he is the mediator. Of course we recall that Whitehead has dispensed with classes and speaks of multiplicities. But he seems to be committing a logical error whether we speak of classes or of multiplicities. Whitehead's answer to our objection probably would be a description of the antithetical character of God.[1] But the fact remains that on the score of universals versus particulars the ontological principle has no deep metaphysical significance. Whitehead is trying to serve two masters--Plato and Aristotle. The ontological principle succeeds only in rendering lip service. Whitehead is irrevocably the servant of Plato and none other. Nevertheless it does rule out any transcendental absolute and paves the way for a pluralistic and atomistic universe.

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[1] The reader is referred to Process and Reality, Pt. V, ch. ii, especially p. 528.

The second principle which we have singled out is the principle of Process. The first statement of it is found in the first category of explanation: "That the actual world is a process, and that the process is the becoming of actual entities."[1] It is apparent that this principle asserts a duality of process. There is the process of the world as a whole and there are the processes of the individual actual entities, or creatures, or actual occasions which collectively constitute the world. Whitehead names these two species of process respectively the macroscopic process and the microscopic process.[2] This division of the principle of Process foreshadows our two remaining principles. For the Subjectivist principle is concerned with the minute analysis of the processes of individual actual occasions and the Relativity principle explains how individual actual entities can be related to form an organic whole. We shall therefore examine the principle of process briefly, seeking only to ascertain its major significance. The details will be explained in the two specific principles which will be discussed later.

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[1] P.R., p. 33.

[2] Ibid., p. 326.

According to the ontological principle the final realities are actual occasions. Thus actual occasions are not in the world; they constitute the world. Because of this priority of actual entities let us note first the microscopic process.

In the ninth category of explanation there is an elaboration of this principle: "That how an actual entity becomes constitutes what that actual entity is; so that the two descriptions of an actual entity are not independent. Its being is constituted by its 'becoming'. This is the 'principle of process'."[1] This kind of fluency is called 'concrescence', and is for Whitehead, the real internal constitution of the particular existent. Every occasion is thus a droplet of experience characterized by the 'universal of universals' creativity. Every concrescence moves toward its final cause which is the complete satisfaction of the process itself. However the complete analysis of concrescence awaits our discussion of the Subjectivist principle.

The macroscopic process is the transition from particular existent to particular existent. It is the fluency of the world. Actual entities pass away and we have the notion of time. Actual entities leave traces of their having been and we have the notion of the origination of the present in conformity with the power of the past.

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[1] *Ibid.*, pp. 34-35.

There is thus a dual aspect to the macroscopic process. That aspect which is time itself, the perpetually perishing of actual entities; that aspect which gives us the notion of causation or causal efficacy. This latter aspect of the process of the world explains why the flowing of all things is not merely a chaotic flux. 'Time like an ever-rolling stream bears all its sons away' but their deeds have relevance for the future. Whitehead puts it even more poetically:

> 'Pereunt et imputantur' is the inscription found on old sundials in 'religious' houses:
>
> 'The hours perish and are laid to account'.
>
> Here 'Pereunt' refers to the world disclosed in immediate presentation, gay with a thousand tints, passing and intrinsically meaningless. 'Imputantur' refers to the world disclosed in its causal efficacy, where each event infects the ages to come, for good or for evil, with its own individuality.[1]

Yet for a complete analysis of how there can be the fact of the conformation of the present to the past, which is the essence of the macroscopic process, we must wait until we discuss the Relativity principle.

Our reason for introducing the principle of process despite the fact that the complete analysis of it is reducible to our remaining two principles is that it exemplifies best why Whitehead calls his metaphysics a "philosophy of organism." For the macroscopic process effects the transition of actual things into the processes of the becoming things and the microscopic process effects the growth of new actual things which enrich and increase the world. These two species of process jointly account for the existence in the world of the creative advance into novelty that characterizes organisms. Without growth organisms lapse into decay and perish. The world is an organism because it grows. The macroscopic process provides the conditions which govern the attainment of growth; the microscopic process provides the ends actually attained. The former process is efficient; the latter process is teleological.[1] The principle of process thus exemplifies the ultimate metaphysical principle of the advance from disjunction to conjunction, with the creation of novel entities other than the entities given in disjunction.

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[1] S., p. 47.

Whitehead's principles are so closely related that there is always the element of repetition in each one of them. They are bound together in such a way that they presuppose each other and it is only in the minute shadings of their meanings that they seem appreciably different. This is so of the Subjectivist principle. Not only is it similar to the Process principle but it reminds us of the ontological principle. The most striking statement of the subjectivist principle is this: "That apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness."[1] Here in this principle we see reflected the notion that there is no going behind actual entities to find anything more real. But in addition to this it beckons us to explore the nature of the actual entity and to discover the kinds of experiences it may have. Yet again this involves the microscopic species of process for we know that the actual entity is a concrescence; its being is constituted by its becoming. So we conclude that the experiences of subjects or of actual occasions constitute the subjects or actual occasions. Experiences thus form the basic category and there is a reiteration of the denial of substance. We shall develop this principle further in the body of our thesis where we shall see that experiences, prehensions, and feelings are synonymous terms for the same reality. Aside from experiences, or feelings, or prehensions, or appetitions, there is nothing. For actual occasions are but bundles of feelings.

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[1] Cf. P. R., pp. 326-327.

The complete gist of the subjectivist principle is given in four categories of explanation, (x) to (xiii). Collectively they constitute the repudiation of the notion of 'vacuous actuality' which as Whitehead defines it means the notion of a res vera devoid of subjective immediacy. Also these categories repudiate the closely allied notion of 'inherence of quality in substance'. Which of course is a derivative of the belief in substance.[1] Because we shall refer to them often in our thesis the four categories are quoted below:

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[1] Ibid., p. 254.

> (x) That the first analysis of an actual entity, into its most concrete elements, discloses it to be a concrescence of prehensions, which have originated in its process of becoming. All further analysis is an analysis of prehensions . . .
>
> (xi) That every prehension consists of three factors: (a) the 'subject' which is prehending, namely, the actual entity in which that prehension is a concrete element; (b) the 'datum' which is prehended; (c) the 'subjective form' which is *how* that subject prehends that datum.
>
> Prehensions of actual entities--i.e., prehensions whose data involve actual entities--are termed 'physical prehensions'; and prehensions of eternal objects are termed 'conceptual prehensions.' Consciousness is not necessarily involved in the subjective forms of either type of prehension.
>
> (xii) That there are two species of prehensions: (a) 'positive prehensions' which are termed 'feelings', and 'negative prehensions' which are said to 'eliminate from feeling'. Negative prehensions also have subjective forms. A negative prehension holds its datum as inoperative in the progressive concrescence of prehensions constituting the unity of the subject.
>
> (xiii) That there are many species of subjective forms, such as emotions, valuations, purposes, adversions, aversions, consciousness, etc.[2]

We note that in category (x) the division of an entity discloses nothing but prehensions. Yet in category (xi) we have mention of a 'subject' which seems to transcend the prehensions and ~~becomes~~ different from them. If this is so then the microscopic type of process which asserts that the being of an actual entity is constituted by its becoming seems to be contradicted. For the subject would have a being independent of its prehensions or of its becoming. Whitehead recognizes that it is fundamental to the metaphysical doctrine of the philosophy of organism, that the notion of an actual entity as the unchanging subject of change be completely abandoned. His denial of subject-predicate categories demands this. Being also aware of the difficulty we have pointed out he explains what he means in the following statement.

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[1] Cf. *P.R.*, p. 43.

[2] *Ibid.*, p. 35.

> An actual entity is at once the subject experiencing and the superject of its experiences. It is subject-superject, and neither half of this description can for a moment be lost sight of. The term 'subject' will be mostly employed when the actual entity is considered in respect to its own real internal constitution. But 'subject' is always to be construed as an abbreviation of 'subject-superject'.
>
> The ancient doctrine that 'no one crosses the same river twice' is extended. No thinker thinks twice; and, to put the matter more generally, no subject experiences twice.[1]

As a matter of fact Whitehead's solution is successful. But in actual practice he has to resort to the use of the notion of a subjective unity which remains the same throughout the concrescence. We shall see in Chapter III how he successfully upholds this particular phase of the subjectivist principle.

[1] Ibid., p. 43.

A final point to be noted concerning the subjectivist principle and its relation to the concrescent process is that each concrescence reaches a determinate end. This final phase in the process of concrescence constituting the actual entity is one complex determinate feeling which is termed the 'satisfaction'. "This satisfaction is fully determinate (a) as to its genesis, (b) as to its objective character for the transcendent creativity, and (c) as to its prehension--positive or negative--of every item in the universe."[1]

It may be pointed out that the final feeling which is the determinate satisfaction is designed to keep the concrescent processes from being a mere welter of flux. Without the termination of processes there can be no objects. Processes become objectified when they perish; the perishing is the attainment of satisfaction. In a sense then, actual things never really are. The creatures perish and become immortal. "This conception of an actual entity in the fluent world is little more than an expansion of a sentence in the Timaeus (Jowett's translation): 'But that which is conceived by opinion with the help of sensation and without reason, is always in the process of becoming and perishing and never really is.'"[2]

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[1] Cf. *ibid*., p. 38. Category (xxv).

[2] *Ibid*., p. 126.

The point we wish to make here is that in the philosophy of organism where process is dominant, in fact the sole actuality, there is a real difficulty. If the actual entity "never really is" then there is no determinate satisfaction. But if there is a determinate satisfaction the actual entity is for an instant, that instant in which the process is completed and before it perishes, a static bit of reality. Whitehead sees the difficulty but does not explicitly solve it.

> In the conception of the actual entity in its phase of satisfaction, the entity has attained its individual separation from other things; it has absorbed the datum, and it has not yet lost itself in the swing back to the 'decision' whereby its appetition becomes an element in the data of other entities superseding it. Time has stood still--if only it could.[1]

The discussion is doubtless rather detailed for the purposes of this thesis but we beg leave to examine it briefly for there is a difference of opinion over the solution of the difficulty. John Blyth thinks it amounts to a flat contradiction in Whitehead's philosophy.[2] Gregory Vlastos contends that Whitehead has a Hegelian dialectic of objects and events. Thus because of the dynamic nature of the internal relations existing between the thesis and the antithesis there is no contradiction.[3]

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[1] *Ibid.*, p. 233.

[2] *Whitehead's Theory of Knowledge*, doctoral dissertation, Brown University, 1936, p. 22.

[3] "Organic Categories in Whitehead," *The Journal of Philosophy*, XXXIV (1937), 253-62.

However, there is no contradiction and the solution is much simpler than the analysis Mr. Vlastos proposes. Whitehead has an epochal theory of time.[1] The genetic phase, or the concrescent process of the actual entity is not one of temporal succession. In fact it is not in time. Each phase of the genetic process presupposes the entire quantum. The genetic passage from phase to phase is not in physical time. Physical time makes its appearance only at the instant of satisfaction. This of course is a reflection of the modern view of the unreality of Newtonian time. Time is just the passage of events and until there are actual occasions that perish there is no time. Actual occasions are the limiting types of events. They come to be and they pass away as wholes. As such there is no static point of stoppage. Whitehead is not explicit about his epochal theory of time. Professor Parker has a similar view which expresses the point much better and makes explicit what we have been trying to point out.

> For when E, an elementary true event, not a string of events, comes to be, it comes to be as a whole, and no part of it is passing away, or has passed away; likewise, when it is passing away, it passes as a whole, and no part of it has passed away until the whole has passed away; otherwise, the event would not be an event and would forfeit the dynamic, quivering, moving character intrinsic to an event, and the distinctive quality of becoming would be lost in a mere succession of static states of being.[2]

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[1] See P.R., pp. 105 f.; p. 434.

[2] Parker, op. cit., p. 150.

With the epochal theory of time Whitehead can hold to the subjectivist principle and also to the theory of objectified actual entities without a contradiction. We can dismiss his cryptic sentence "Time has stood still, if only it could," as a bit of poetic nonsense rather than an admission of inadequacy in his system. It is unfortunate that it has confused the unwary.

We now come to the fourth and last of the principles which we have elicited from the twenty-seven categories of explanation. The essence of the Relativity principle is that every item of the universe, including all the other actual entities, are constituents in the constitution of any one actual entity.[1] The categorial statement of the principle is in the fourth category of explanation:

> That the potentiality for being an element in a real concresence of many entities into one actuality, is the one general metaphysical character attaching to all entities, actual and non-actual; and that every item in the universe is involved in each concrescence. In other words, it belongs to the nature of 'being' that it is a potential for every 'becoming'. This is the 'principle of relativity'.[2]

This ontological version of the general theory of relativity issues into two important metaphysical implications. The first is the doctrine that actual entities function in the constitution of other actual entities.

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[1] Cf. P.R., p. 224.

[2] Ibid., p. 33.

This doctrine of internal relations arises because in the prehending of an entity the prehended entity or datum becomes a part of the prehension. And all prehensions are referable to the concrescent actual entity of which the prehension is a part. Thus a given actual entity in virtue of its prehensions is constituted of other entities whether eternal objects or actual occasions.

Whitehead points out a corollary of this doctrine of internal relations which is a part of the epochal theory of time. That is that actual entities do not change. Their real internal constitution is what it is in virtue of their internal relations to other actual entities. "Actual entities perish, but do not change; they are what they are."[1] Thus every actual occasion has a definite status in the universe. They exist as wholes and they pass away as wholes. Change, like time, therefore is possessed of a certain illusoriness. It is not 'real' in the same sense in which time is not 'real'. Actual entities are the final realities of the world. "'Change,'" says Whitehead, "is the description of the adventures of eternal objects in the evolving universe of actual things."[2] Despite this challenge to our common sense notions we are forced to conclude that there is no contradiction between the conception of a world of process and the conception of unchanging entities. The process arises from the perishing of entities and from the concrescences of entities.

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[1] Ibid., p. 52.

[2] Ibid., p. 92.

How an actual entity can function in the constitution of another actual entity is explained by Whitehead's theory of objectification. This is the second implication of the relativity principle. Objectification is the description of the actual occasion after it has come to be and has passed away. After the determinate satisfaction has been achieved it obtains objective immortality and functions in the constitution of other actual entities in much the same way as an eternal object. "The functioning of one actual entity in the self creation of another actual entity is the 'objectification' of the former for the latter actual entity. The functioning of an eternal object in the self creation of an actual entity is the 'ingression' of the eternal object in the actual entity."[1] We know already that the prehension of an actual entity is called a 'physical prehension' and that the prehension of an eternal object is called 'conceptual prehension.' We shall learn later that these prehensions have their origins respectively in the physical and mental poles of the actual entities. At present we need only note that the relativity principle requires that an actual entity transcend

[1] *Ibid.*, Twnety-fourth category of explanation, p. 38.

itself. The process must end; it must become an 'object' and thus be causally efficacious.

The relativity principle with the resultant doctrines of internal relations and of objectification makes the category of 'relation' dominant over that of 'quality'. This is in keeping with Whitehead's general rejection of subject-predicate categories. A result of this state of affairs is that Whitehead lays violent hands upon a traditional philosophical distinction:

> The antithetical terms 'universals' and 'particulars' are the usual words employed to denote respectively entities which nearly, though not quite, correspond to the entities here termed 'eternal objects', and 'actual entities'... These terms both in the suggestiveness of the two words and in their current philosophical use, are somewhat misleading . . . . The ontological principle and the wider doctrine of universal relativity . . . blur the sharp distinction between what is universal and what is particular . . . . An actual entity cannot be described even inadequately by universals; because other actual entities do enter into the description of any one actual entity.[1]

In the light of Whitehead's general philosophical theory there is nothing abstruse or mystical about this "blurring" of universals and particulars. He is reiterating the scientific principle that every bit of energy shakes the whole universe; that the environment enters into the nature of each thing.

We have now examined the four principles which seem to summarize the twenty-seven categories of explanation.

[1] Ibid., p. 76.

The Ontological principle, the Process principle, the Subjectivist principle, and the Relativity principle we have found to be mutually interdependent and interrelated. We next consider the final set of categories.

SECTION VII. THE CATEGORIAL OBLIGATIONS

The nine categorial obligations are not explanatory statements. Rather they are expressions of the permanent characteristics of actuality. They might be likened to discovered ontological laws inherent in the nature of things. They pertain universally to all actual entities and in some measure each actual entity must conform to the operations which these obligations prescribe. The nine categories appear to fall naturally into three distinct groups. We shall consider each category individually but the discussion of any one category will come while we are considering either of the three groups as a whole.

Arbitrarily, we shall begin with the second and third categories which seem to comprise one of our groups. We make this arbitrary decision because we have mentioned already the Category of Objective Identity and the Category of Objective Diversity in the discussion of multiplicities. Category (ii) states: (a) that there can be no duplication of any element in the satisfaction of an actual entity; (b) that each element has one self-consistent function, however complex. Category (iii) asserts that there can be no coalescence of diverse actual entities so that they exercise an absolute identity of function devoid of the 'contrasts' inherent in their diversities. We have already noted that classes as new entities do not come into existence. It is in the same sense that Whitehead would contend that no uniquely new properties arise which define a new actual entity. What do arise are 'contrasts', intermediate types of existence which have no reality apart from the actual entities which give rise to them. Of this particular type of existence Whitehead remarks that there may be "an indefinite progression of categories, as we proceed from 'contrasts' to 'contrasts of contrasts', and on indefinitely to higher grades of contrasts."[1] This view of course possesses a certain similarity to that of emergent evolutionism. However the difference lies in that contrasts do not define a new individual; they are only universals. In the emergent theory integration gives rise to new properties which define new actual entities.[2]

Our second grouping of the categorial obligations includes the first, the seventh, the eighth, and the ninth. The four are allied because all deal either with the subject or the subjective aim of the actual occasions. Category (i), that of Subjective Unity, states that the many feelings which constitute the concrescent process of an actual entity are compatible for integration because of the unity of their subject. Category (vii), Subjective Harmony, asserts that the valuations of conceptual feelings are determined by their adaptation to be contrasted elements congruent with the subjective aim. "Category (i) has to do with data felt, and category (vii) with the subjective forms of the conceptual feelings. This *pre-established harmony* is an outcome of the fact that no prehension can be considered in abstraction from its subject, although it originates in the process creative of its subject."[1]

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[1] *Ibid.*, p. 33; p. 349.

[2] Cf. R. W. Sellars, *Evolutionary Naturalism* (Chicago: The Open Court Publishing Company, 1922).

The eighth category, Subjective Intensity, asserts an intensity of feeling of the subjective aim (a) in the immediate subject, and (b) in the relevant future. There is thus a double aim which is not greatly divided. For the aim at the immediate present is conditioned by its relevance for the future and the aim at the relevant future is certainly conditioned by the aim at the present. This implies that there is always an anticipatory feeling in the concrescence of any actual occasion. In this category might be found the foundations for an ontological theory of morality.

The ninth category, Freedom and Determination, completes the quartet of our second group. It states that the concrescence of each individual actual entity is internally determined and is externally free.

[1] *P.R.*, p. 41. The italics are mine.

> This category can be condensed into the formula, that in each concrescence whatever is determinable is determined, but that there is always a remainder for the decision of the subject-superject of that concrescence. This subject-superject is the universe in that synthesis, and beyond it there is nonentity. This final decision is the reaction of the unity of the whole to its own internal determination. This reaction is the final modification of emotion, appreciation, and purpose. But the decision of the whole arises out of the determination of the parts, so as to be strictly relevant to it.[1]

We might remark that the instant of freedom which occurs in the final modification or determinate satisfaction must be brief indeed. For the entity perishes at the precise moment that it comes to be. The final modification of emotion, appreciation, and purpose which constitutes freedom might be likened to Moses' glimpse into the land of Canaan. Or better still, as it were, that Moses should enter into the promised land but die in the passage across the border. The important point however, is that according to the epochal theory of time, the "whole" of Moses would get across the border, though Moses should pass away the instant the border was crossed. For actual occasions come to be and pass away as wholes.

The third and final group of Obligations are (iv) The Category of Conceptual Valuation; (v) The Category of Conceptual Reversion; (vi) The Category of Transmutation. The characteristic they hold in common is that they deal with the interaction between the physical and conceptual feelings of the actual occasion. These three categories constitute a minimum statement of Whitehead's theory of perception. The first of the group states that from each physical feeling there is the derivation of a purely conceptual feeling whose datum is the eternal object determinant of the definiteness of the actual entity, or of the nexus, physically felt. Translated into prosaic terminology it means simply that from every awareness of a particular there is a derivative conceptual awareness of a universal which contributes to the essence of that particular. For example, I am physically aware of the pen with which I write, but derivatively aware of the universal 'cylindrical' which assigns a certain definiteness of character to the pen. Thus category (iv) is concerned with the conceptual reproduction of physical feeling.[1]

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[1] *Ibid.*, pp. 41-42.

Category (v) asserts a secondary origination of conceptual feelings initially given. The data of the derived conceptual feelings are partially identical with, and partially diverse from, the eternal objects forming the data in the first phase of the mental pole. This diversity is a relevant diversity determined by the subjective aim. An excellent example is my conceptual feeling of the yellowness of this paper. Derivatively I entertain feelings of whiteness, blueness, greyness. These feelings

[1] Cf. *ibid*., p. 40.

are partially identically with the initial feeling of yellow in that all are feelings of colour. Yet they are partially diverse for they are feelings of different kinds of colour. This diversity is relevant to my subjective aim because the aim is at diversified enjoyment--in this case the pleasure derivable from contemplating a medley of colours.

An analysis of the category of Transmutation reveals that what is explained is simply how we are able to 'feel' the many blades of grass as one nexus, the grassy patch. The simplest rendition is that whenever we get a conceptual feeling according to category (iv), or conjointly with categories (iv) and(v) we may take the eternal object thus felt as ingressing in the many and attribute it to the nexus as one. "It is evident that the complete datum of the transmuted feeling is a contrast, namely, 'the nexus, as one, in contrast with the eternal object'. This type of contrast is one of the meanings of the notion 'qualification of physical substance by quality'."[1]

The striking feature of these last three categorial obligations is that all are expressed in terms of the activity or even the volition of the subject of the actual occasion. We therefore found it easier to explain them in terms of human perception. But all

[1] Ibid., p. 40.

categories are of the utmost generality and must be interpreted as applying in some degree to all actual entities in existence. These categories, however, "only have importance in the case of high-grade organisms. They constitute the first steps towards intellectual mentality, though in themselves they do not amount to consciousness. But an actual entity which includes these operations must have an important intensity of conceptual feelings able to mask and fuse the simple physical feelings."[1]

SECTION VIII. THE WELTBILD

The preceding section on the Categories of Obligation completes our preliminary inspection of the categorial scheme. Insofar as this chapter has been successful we should be sufficiently well acquainted with the structure of the scheme, the reasons for the technical language of the scheme, and the general metaphysical implications of the scheme to begin our inquiry. The study of thought and language in terms of the categorial notions we have briefly examined will shed new light on the categories themselves. The categories will likewise add depth to our attempted ontological investigation of human experience.

The outlines of the world in which we seek the origin and the nature of thought and of language have become increasingly clear. Macroscopically and microscopically the world is a process, dynamic and organismic. We are dealing with actual entities that are atomic creatures, individual and discrete. "The ultimate metaphysical truth is atomism. But atomism does not exclude complexity and universal relativity. Each atom is a system of all things."[1] The solidarity of the world is manifested by the fundamental internality of relations which is the result of the universal relativity principle. On the other hand, because of the individual discreteness of atomic creatures there must be some way in which relationships holding between actual entities can be conceived as external, that is, as bonds, between divided things.[2] Whitehead's 'extensive continuum' serves this double purpose. Whitehead's conception of the abstract physical world is a negation of the Newtonian view that absolute durations of time are actual things and that absolute places are actual things. The extensive continuum is a relational space-time complex in which all potential objectifications find their niche.[3] "Actual entities atomize the extensive continuum. This continuum is itself merely the potentiality for division; an actual entity effects this division."[1] The emphasis upon the potentiality of the extensive scheme definitely separates it from the Newtonian view. For the continuum "is not a fact prior to the world; it is the first determination of order--that is, of real potentiality--arising out of the general character of the world."[2] Actual occasions are the final realities. In respect to time, the actual entities atomize the extensive scheme in the special form of the 'epochal theory of time'.[3] In respect to space, every actual entity in the temporal world is to be credited with a spatial volume for its perspective standpoint.[4]

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[1] *Ibid.*, p. 388.

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[1] Ibid., p. 53.

[2] Cf. ibid., pp. 470-71.

[3] Cf. ibid., p. 103.

These problems themselves however are special topics in Whitehead's philosophy and are not entirely relevant to this thesis. We can only point them out and note their general metaphysical trend and significance. We are justified in dismissing them because they are the macroscopic aspects of the universe. Thought and language are the activities of individual entities; hence we are concerned with the microscopic features of the universe.

The fundamental or ultimate units of the world have been described as droplets of experience. In using the term experience Whitehead repudiates the traditional

[1] Ibid., p. 104. The italics are mine.

[2] Ibid., p. 103.

[3] Cf. S.M.W., ch. vii.

[4] Cf. P.R., Pt. IV.

assumption that the basic elements of experience are to be described in terms of one, or all, of the three ingredients, consciousness, thought, sense-perception. "According to the philosophy of organism these three components are unessential elements in experience, either physical or mental . . . these elements, consciousness, thought, sense-perception, belong to the derivative 'impure' phases of the concrescence, if in any effective sense they enter at all."[1] Blind prehensions, physical and mental, are the ultimate bricks of the universe.[2]

Thus we see that our search for the origins of thought and of language must be centered around an investigation of the higher-grade actual entities or the higher-grade nexūs and organisms which arise through the organization of individual actual occasions.

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[1] Ibid., p. 54.

[2] Ibid., p. 470.

CHAPTER III

SUBJECT, SELF, AND MIND

SECTION I. PREFATORY

The universe in which we seek the origin of thought and language as adjuncts within experience may be viewed from two aspects. These aspects have analogues in the macroscopic process of the world which is transition and the microscopic fluency which is concrescence. There is the factor of unity, involving in its essence the connexity of things, unity of purpose, and unity of enjoyment. There is also equally fundamental in the universe, a factor of multiplicity. There are many actualities, each with its own experience, enjoying individually, and yet requiring each other. Any description of the unity requires the many actualities and any description of the many requires the notion of unity. But the world is characterized by essential individuality and atomicity of its members.[1]

Our enquiry is necessarily directed to the microscopic aspect of the universe. For thought and language are referable to those high grade actual occasions and organisms that are capable of enjoying complex experiences.

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[1] Cf. M.T., p. 70; P.R., pp. 53; 92-94; 334.

We propose in this chapter to investigate the nature of those entities which think and communicate. Accordingly we shall be concerned with the notions dealt with in Chapter II, actual occasions, nexūs, and prehensions.

As a basis for our subsequent investigation of thinking and communicating the chapter is built around an analysis of three concepts. These concepts are subject, self, and mind. In Whitehead's philosophy mind, as we shall see, may be attributed to either the subject or the self. However there is a distinction between the subject and the self. This difference is implicit in the philosophy of organism, as it is in practically every philosophy; but it is occasionally overlooked. Subject is a term generic to any philosophy of experience. For it is apparent that every experience implies something to be experienced and something else which experiences it. That which experiences is the subject.[1] In a world that is a multiplicity of droplets of experiences there is obviously a multiplicity of subjects. Hence the term subject is referent to diverse entities, each being what it is, dependent upon others, but essentially its own. We may say that the identity of a subject is a monadic relation or a reflexive relation. But in a strict sense we should not speak of the identity of a subject at all. Rather we should talk about the

[2] Cf. A.I., ch xi, "Objects and Subjects."

individuality of the subject. For we are primarily concerned with why one subject should be what it is and not another thing.

The self however refers to personal identity. It is a one-many relation referent to many subjects. For by the term self we mean that thread of identity which is present in a series of subjects. The point we are trying to make is that the term subject is referent to individual actual occasions and that the term self is referent to a nexus or a series of actual occasions. If an actual occasion occurs in a series of actual occasions which define an ordered nexus then it may be said that it embodies the self of the series. But outside of such ordered series the term self has no application to actual occasions. Hence we shall speak of the 'subjects' of actual occasions and of the 'selves' of ordered series or nexūs.

Now while it is apparent that subjects have individuality and the term identity lacks justifiable application, it is equally apparent that selves have both identity and individuality. In this case the identity, as we have shown, is a one-many relation referent to all the subjects composing the self. But the individuality of the self is a reflexive, or monadic relation; it is referent to the self as one in the same manner as the individuality of the subject is referent to one. By the individuality of the self we mean its distinction from other selves. Hence while the identity of the self is referent to its many subjects, the individuality of the self is referent to its relationship with other selves. Now we shall see in this chapter that the individuality of the self is determined by the individuality of the many subjects contributing to the self.

In this chapter we shall analyze the actual occasion seeking to find the subject and the key to its individuality. We shall also investigate nexūs, or societies seeking to find the self, the reason for its identity among its subjects and the reason for its individuality among other selves. In conjunction with this research we shall happen upon the nature of mind, mentality in the higher organisms obviously being referent to both subjects and selves.

SECTION II. THE SUBJECT

We know that "an actual entity is a process and is not describable in the morphology of a stuff."[1] There is a becoming of many feelings into the unity of one actual occasion. At the completion of the process of becoming there is a final determinate satisfaction which closes the process. The occasion perishes and thereby achieves objective immortality. Whitehead's rejection of subject-predicate categories requires him to put the subject of the concrescence into flux. Since he desires a philosophy of complete process there is no longer a static subject enjoying experiences. The subject is fluid; it must be both an agent responsible for the specific course of that concrescence, and the product of that process. An occasion of experience is thus two things, both feeler and emergent feeling, a subject and a superject. For Whitehead, then, there is always a duality about the use of the word 'actual occasion.' At times he speaks of the actual occasion as the subject of its experiences and at times he speaks of the actual occasion as the superject of its feelings. But either mode of expression is successful in keeping the term 'subject' or the coined phrase 'subject-superject' fluid and in process. Thus strictly speaking, there is no subject of an actual occasion; the actual occasion is the subject. And there is no subject of the concrescence; the concrescence is the subject. Whitehead thus discards all transcendental and static subjects of the type embodied in subject-predicate categories. An analysis of the subject-superject is exactly synonymous with an analysis of an actual occasion. The two are identical. Thus except for the final phase of determinate satisfaction the subject-superject or actual occasion is fluent and in concrescence.

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[1] P.R., p. 165.

Whitehead states this difficult doctrine in terms which at times seem intelligible. "The philosophies of substance presuppose a subject which then encounters a datum, and then reacts to the datum. The philosophy of organism presupposes a datum which is met with feelings, and progressively attains the unity of a subject. But with this doctrine, 'superject' would be a better term than 'subject.'"[1] Of these 'feelings' Whitehead writes: "The feelings are inseparable from the end at which they aim; and this end is the feeler. The feelings aim at the feeler, as their final cause."[2] This final cause is none other than the subject-superject immanent in the process of feeling. It constitutes the unity of the feelings and it is "the purpose of the process originating the feelings."[3]

That we may be as fair as possible in presenting this doctrine of the subject-superject we give two more quotations in which Whitehead contrasts his position with Descartes and Kant respectively.

> Descartes in his own philosophy conceives the thinker as creating the occasional thought. The philosophy of organism inverts the order, and conceives the thought as a constituent operation in the creation of the occasional thinker. The thinker is the final end whereby there is the thought. In this inversion we have the final contrast between a philosophy of substance and a philosophy of organism. The operations of an organism are directed toward the organism as a 'superject,' and are not directed from the organism as a subject. The operations are directed from antecedent organisms and to the immediate organism. They are 'vectors,' in that they convey the many things into the constitution of the single superject.[4]

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[1] *Ibid.*, p. 234.

[2] *Ibid.*, p. 339.

[3] *Ibid.*

[4] *Ibid.*, pp. 228-29. The italics are his.

> For Kant, the world emerges from the subject; for the philosophy of organism, the subject emerges from the world--a 'superject' rather than a 'subject' . . . . The feeler is the unity emergent from its own feelings; and feelings are the details of the process intermediary between this unity and its many data. The data are the potentials for feelings; that is to say, they are objects. The process is the elimination of indeterminateness of feeling from the unity of one subjective experience.[1]

This doctrine of the subject-superject does not seem to me to be completely unintelligible. I am aware however that some others consider it to be verbal nonsense.[2] However since Whitehead's extra-categorial philosophy of language patently asserts the inadequacy of language to express philosophical meaning the mere linguistic difficulty of the passages does not seem to be the point at issue. The true critical question is whether each actual occasion, or each droplet of experience, is like what Whitehead's language attempts to describe it as. Is there the fluid duality of subject-superject, the immanent and the emergent, in each occasion of existent experience? It may be as Whitehead himself points out that there can be no proof for such a doctrine. There can be only that self-evidence which is sheer disclosure.[3] Or to use Parker's term, perhaps we can grasp it only by an 'indefeasible intuition.'[1] Be that as it may, the fact remains that we do in some sense comprehend what Whitehead is talking about. For the purposes of our thesis we face the question 'Is such an account of experience adequate for an explanation of thought and language?' This question however comes later.

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[1] Ibid., pp. 135-36. The italics are mine.

[2] Cf. W. M. Urban, "Elements of Unintelligibility in Whitehead," The Journal of Philosophy, XXXV (1938), 626; also, D. L. Miller and G. V. Gentry, The Philosophy of A. N. Whitehead (Minneapolis: Burgess Publishing Company, 1938), pp. 162-63.

[3] Cf. M.T., p. 67.

Now we are concerned primarily with two problems. First, what constitutes that inherent unity that guides the concrescence from its initial phase to its final determinate satisfaction of complete subject-superject? Second, in what does the essential individuality of the concrescent subject-superject consist? Both questions of course are of deep metaphysical significance. For this thesis however the importance of the latter lies in its implications for the diversity of thought; the importance of the former in its implications for the unity of the thought process itself. If we wish to label these two problems we may say that the first is to seek a principle of concretion and that the second is concerned with a principle of individuation. It seems likely that the key to these two principles should be found somewhere in the origin of the actual entity. Hence we shall investigate how actual occasions initially come to be.

"Each actual entity," writes Whitehead, "is conceived as an act of experience arising out of data. It is a process of 'feeling' the many data, so as to absorb them into the unity of one satisfaction."[1] The inception of an actual occasion thus has a double aspect. Assuredly there are the data; and in an independent sense there is the act of experience which arises out of the data. "The breath of feeling which creates a new individual has an origination not wholly traceable to the mere data. It conforms to the data, in that it feels the data. But the how of feeling, though it is germane to the data, is not fully determined by the data."[2] It is obvious that the act of experience and the data are closely interrelated. Thus in a sense any discussion of one implies the relevance of the other. Because of the priority of the given world of fact let us examine first the data. The investigation is precursory however for we are concerned primarily with the act of experience which initiates a new concrescence.

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[1] Parker, op. cit., p. 84.

Of the data Whitehead writes: "The ground, or origin, of the concrescent process, is the multiplicity of data in the universe, actual entities and eternal objects and propositions and nexūs."[3] Since Whitehead considers the subject-object relation to be the fundamental structural pattern

[1] P.R., p. 65.

[2] Ibid., p. 131. The italics are his.

[3] Ibid., p. 343.

of experience[1] we may assume that the data correspond to the objects which the subject prehends. The identification of objects and data is apparent if the following passage be compared with the one just quoted. ". . . the other things, in their limited rôles as elements for the actual entity in questions are called 'objects' for that thing. There are four main types of objects, namely, 'eternal objects,' 'propositions,' 'objectified' actual entities and nexūs."[2] This passage is more accurate than the first in that it correctly states that 'objectified' actual entities are data or 'objects' for concrescent processes.

Our examination of the ground or data of all new actual entities introduces us to terms with which we are already acquainted. The eternal objects are universals existing primarily in the primordial nature of God. Objectified actual entities are completed processes with immortality in virtue of their having perished. The propositions are the hybrid, quasi-universals, the tales which might be told about particulars. And the nexūs are organizations of actual occasions. Thus being assured that we are on familiar ground we resume our investigation of the genesis of actual occasions. And we must remember that we are searching for guiding concretion and individuality.

[1] A.I., p. 225.

[2] P.R., p. 82.

For our two-fold problem, that of the principle of concretion and of the principle of individuality Whitehead proposes a two-fold answer. This answer is to be found in the duality of the act of experience itself which arises out of the data.

> In each concrescence there is a twofold aspect of the creative urge. In one aspect there is the origination of simple causal feelings; and in the other aspect there is the origination of conceptual feelings. These contrasted aspects will be called the physical and the mental poles of an actual entity. No actual entity is devoid of either pole; though their relative importance differs in different actual entities. Also conceptual feelings do not necessarily involve consciousness; though there can be no conscious feelings which do not involve conceptual feelings as elements in the synthesis.
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> Thus an actual entity is essentially dipolar, with its physical and mental poles; and even the physical world cannot be properly understood without reference to its other side, which is the complex of mental operations. The primary mental operations are conceptual feelings.[1]

At this point we may state summarily that the physical pole mentioned above is to account for the individuality of the subject-superject. Also that this physical pole gives rise to physical prehensions or feelings. These physical prehensions, according to the eleventh category of explanation, are concerned with the objectified actual entities and nexūs among the data which form the ground of the nascent actual occasion. The mental pole is the reply to our request for a principle of concretion or guiding unity. It accounts for the orderly growing together

[1] P.R., p. 366.

necessary for the emergence of the subject-superject. The conceptual feelings of the mental pole prehend the eternal objects. Through interaction with the physical pole they also prehend the propositions which are part of the data for the new actual occasion. There is mutual interaction between the feelings of the two poles because of their conformity to categorial obligations (iv), (v), and (vi).[1]

It is apparent that around the mental pole we find the germ of mind. All of these statements however are anticipatory. We place them before us now because the problems of just how each pole originates and of the initial priority of either pole will engage our immediate attention. These problems have profound implications for Whitehead's general metaphysical theory as well as for the point of view of our thesis. 'The breath of feeling which creates the new individual fact' or 'the act of experience arising out of data' are explainable in Whitehead's philosophy only by God's benevolence. He says this himself: "Apart from the intervention of God, there could be nothing new in the world, and no order in the world. The course of creation would be a dead level of ineffectiveness, with all balance and intensity progressively excluded by the cross currents of incompatibility."[2] But not only is God the agent of creation but also, as is to be expected in

[1] *Ibid*., pp. 39-40.

[2] *Ibid*., p. 377.

a Platonic philosophy, the origination of new actual occasions is due to the ingression of eternal objects. Hence there is the priority of and the dominance of conceptual feeling. "The admission into, or the rejection from, reality of conceptual feeling is the originative decision of the actual occasion."[1] Thus God and the mental pole dominate the initial creation of the actual occasion. In support of this interpretation of the initial phase of the concrescence of an actual entity we offer the following quotation in which God and the mental pole of an actual occasion are linked together.

> Each temporal entity, in one sense, originates from its mental pole . . . . It derives from God its basic conceptual aim, relevant to its actual world, yet with indeterminations awaiting its own decisions. This subjective aim, in its successive modifications, remains the unifying factor governing the successive phases of interplay between physical and conceptual feelings. These decisions are impossible for the nascent creature antecedently to the novelties in the phases of its concrescence . . . . In this sense, God can be termed the creator of each temporal actual entity.[2]

This view of the origination of the actual entity from its mental pole seems to be the logical outcome of Whitehead's Platonic position. Yet he is not entirely satisfied with the interpretation that God and the eternal objects play the chief role in the creation of the novel actual occasions of the world. This is evidenced by his use of the limiting phrases 'in one sense' and 'in this sense.' As we have put the issue, and mind you in his own words, each new actual occasion originates from the mental pole which is donated by God. Hence all actual occasions have their origin in God and there is furthermore a priority of the mental pole. In other passages of Process and Reality Whitehead asserts that each actual occasion has its origin in the actuality of the given world and that there is a priority of the physical pole. That is to say, the physical pole is prior because actual occasions arise out of physical prehensions of objectified actual occasions.

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[1] *Ibid*., p. 131.

[2] *Ibid*., p. 343.

> The objectifications of the actual entities in the actual world, relative to a definite actual entity, constitute the efficient causes out of which *that* actual entity arises; the 'subjective aim' at 'satisfaction' constitutes the final cause, or lure, whereby there is determinate concrescence; and that attained 'satisfaction' remains as an element in the content of creative purpose . . . Thus an actual entity has a three-fold character: (i) it has the character given for it by the past; (ii) it has the subjective character aimed at in its process of concrescence; (iii) it has the superjective character, which is the pragmatic value of its specific satisfaction qualifying the transcendent creativity.[1]

Here it is obvious that Whitehead wants to be a realist and that he places emphasis upon the actual world of fact. The desire for primacy of the Aristotelian 'efficient cause' is evidenced in the general tone of his writing. But throughout one has a feeling of the difficulty of trying to be a realist of the objective kind and of having a God of the omniscient benevolent kind. Whitehead tries to solve the problem by placing the actual world and God on the same level in the originative process of a new actual entity.

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[1] *Op. cit.*, p. 134.

The solution however has its unsatisfactory moments. For example we find on the same page: "God is the principle of concretion; namely, he is that actual entity from which each temporal concrescence receives that initial aim from which its self-causation starts."[1] And, "If we prefer the phraseology, we can say that God and the actual world jointly constitute the character of the creativity for the initial phase of the novel concrescence." Thus on the same page there is the conjoining of God and the world but with the assigning of God as the superior of the two: He is the principle of concretion which donates the initial aim from which the self-causation of an actual entity starts. This initial aim consists of conceptual feelings of the relevant eternal objects in God's primordial nature and thus is identifiable with the mental pole.

We see that despite the conjoining, God is still superior. Also in virtue of his priority of action there is still the priority of the mental pole.

In another passage Whitehead again combines God and the World in the creation of the actual occasion. However this time he asserts the primacy of the physical pole and thus allows us to draw the inference of the priority of the actual world in the creation of novel actual occasions.

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[1] _Ibid_., p. 374.

God and the world are the contrasted opposites in terms of which creativity achieves its supreme task of transforming disjoined multiplicity, with its diversities in opposition, into concrescent unity, with its diversities in contrast. In each actuality there are two concrescent poles of realization, 'enjoyment' and 'appetition'; that is, the 'physical' and the 'conceptual.' For God the conceptual is prior to the physical, *for the World the physical poles are prior to the conceptual poles.*[1]

Whitehead is well aware that he wavers and teeters between asserting the priority of the mental pole given by God and the primacy of the physical pole given by the world. He tries to abolish at one stroke these fluctuations and inconsistencies by pronouncing *ex cathedra* the equal claim to priority of the two extremes. Thus in one sentence we read: "God and the world stand over against each other, expressing the final metaphysical truth that appetitive vision and physical enjoyment have equal claim to priority in creation."[2] Of course this is no solution of the difficulty. Inevitably Whitehead is forced to admit the intrinsic priority of God in creation because he has constructed his philosophy around principles that require that kind of a God.

It may be interesting to note that even when Whitehead is finally forced to admit the priority of God's benevolence in the initial phase of concrescence he attempts to rescue his Aristotelian ideal of the primacy of physical feeling.

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[1] *Ibid.*, p. 528. The italics are mine.

[2] *Ibid.*, p. 529.

> The doctrine that the primary phase of a temporal actual entity is physical, is recovered. A 'physical feeling' is here defined to be the feeling of another actuality. If the other actuality be objectified by its conceptual feelings, the physical feeling of the subject in question is termed 'hybrid.' Thus the primary phase is a hybrid physical feeling of God, in respect to God's Conceptual feeling which is immediately relevant to the universe 'given' for that concrescence. There is then, according to the category of conceptual valuation, i.e., categoreal obligation IV, a derived conceptual feeling which reproduces for the subject the data and valuation of God's conceptual feeling. This conceptual feeling is the initial conceptual aim.[1]

The point Whitehead makes is clear. God is another actual entity. Hence though he creates the actual entity by endowing it with conceptual aim or a mental pole there is still priority of physical feeling in virtue of the fact that what is felt first, God, is an actual entity. The argument is that in the case of God an actual entity cannot feel the eternal objects directly. It can only "feel God feeling the eternal objects." Hence the first feeling of eternal objects is a hybrid one, a physical feeling first of God as an actual entity and then a derivative feeling of the eternal objects which God is feeling.

The solution is logically possible if it be granted that there is a simultaneous origination of the physical pole from the world of objectified actual occasions. There must be a physical pole if there is to be physical feeling. Yet it seems that even though the physical pole exists

[1] *Ibid.*, p. 343.

'potentially' in the world of past actual occasions it cannot come into 'real existence until after God has endowed the potentiality with a subjective aim or final cause, a 'reason' for there being a concresence. Thus it seems that there cannot be a simultaneous origination of the physical pole. However, if this be waived in view of Whitehead's epochal theory of time which states that the genetic concrescence of the actual occasion cannot be divided in terms of physical time the problem seems to be solved. For 'before' and 'after' would be inapplicable terms. Yet there remains the fact that the genetic process would begin only by God's fiat. Whitehead's resort to such a Pickwickian proof of analysis shows that he is very much on the defensive about this part of his doctrine.

Though Whitehead fluctuates between the two points as to the initial priority of the physical pole against the mental pole, he never hesitates to affirm the guiding authority and supremacy of the mental pole. It seems that 'mental pole,' 'initial aim,' 'conceptual aim,' and 'subjective aim' are synonymous terms which signify the initial decision by God of what is relevant for the nascent actual occasion.[1] Thus when we use any one of these terms it may be understood to connote the others.

[1] *Ibid.*, p. 343.

It is around the mental pole or in the subjective aim which is referent to the mental pole that we find the principle of concretion and guidance. It is the inherent unity of the subject-superject immanent in the concrescent process. It remains one and the same and determines what the final emergent is to be.

Although the genetic concrescence of the actual occasion is not divisible either spatially or temporally, yet because of Whitehead's theory of the extensive continuum there can be coördinate division of objectified actual occasions.[1] The intrinsic unity of the subjective aim is exhibited by the fact that it cannot share in any kind of division. The care of subjective unity retains always its innate inviolability. "The concrescence is dominated by a subjective aim which essentially concerns the creature as a final superject. *This subjective aim is the subject itself determining its own self-creation as one creature.* Thus the subjective aim does not share in this divisibility [of the concrete satisfaction into prehensions]."[2] And yet another striking passage which carries our point:

> The coordinate divisions of the satisfactions as 'feelings which might be separate' expresses that component of the satisfaction which has the character of a unified feeling of the actual world from the standpoint of that

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[1] See *ibid*., pp. 433 ff. for discussion of coördinate division.

[2] *Ibid*., p. 108. The italics are mine.

sub-region. Insofar as the objectification of the actual world from this restricted standpoint is concerned, there is nothing to distinguish this coordinate division from an actual entity. But it is only the physical pole of the actual entity which is thus divisible. The mental pole is incurably one.[1]

Whitehead carries the thought further by stating that "the whole course of the genetic derivation of the coordinate division is not explicable by reference to the categoreal (*sic*) conditions governing the concrescence of feeling arising from the mere physical feeling of the restricted objective datum. The originative energy of the mental pole constitutes the urge whereby its conceptual prehensions adjust and readjust subjective forms and thereby determine the specific modes of integration terminating in the 'satisfaction'."[2]

It is in the linkage of the subjective aim with the rationalization of final causation that Whitehead brings out most clearly the regnant authority of the subjective aim. Thus with the integrating or uniting factor is coupled the purposive, teleological aspect.

> Concrescence moves toward its final cause, which is its subjective aim; . . .[3] This 'subjective aim' at 'satisfaction' constitutes the final cause, or lure, whereby there is determinate concrescence; . . .[4] This subjective aim, in its successive modifications, remains the unifying factor governing the successive phases of interplay between physical and conceptual feelings.[5]

[1] Cf. *ibid*., p. 436. The italics are mine.

[2] *Ibid*., p. 436.

[3] *Ibid*., p. 320.

[4] *Ibid*., p. 134.

[5] *Ibid*., p. 343.

In the light of this proof we seem justified in drawing the conclusion that the principle of guiding concretion is identifiable with the functions of the mental pole or with the activities of any of the correlative terms initial aim, conceptual aim, subjective aim. We have also noticed the seemingly initial priority of the mental pole over the physical pole in the originative phase of concrescence. Contrasted with this has been Whitehead's vacillations concerning God and the world, the mental pole versus the physical pole. Now the causes for Whitehead's oscillations may not be susceptible to complete rationalization. But the need for a physical pole in the actual occasion is immediately apparent. For in the mental pole or the subjective aim of the actual entity, though it is the guiding principle of concretion, we fail to find any basis for an individual personal identity. The physical pole with its origin in the world of objectified actual occasions is designed to contribute the element of uniqueness that makes an actual entity what it is and not another thing.

To make explicit our point that the unifying, indivisible, 'incurably one' mental pole fails to provide for a unique personal identity we may resort to analysis. The mental pole can be resolved into conceptual feelings of eternal objects which God has decided are relevant for the new occasion. By further abstraction we arrive at the notion that these feelings may be rendered in terms of the ingression of eternal objects. Thus the essential self of the actual occasion consists of the eternal objects which God so kindly donates from his primordial nature. Here we have arrived pointblank at a real difficulty. For the eternal objects are universals and are "the same for all actual entities."[1] Not merely conceivably, but without a doubt, these same eternal objects do ingress in other actual occasions. How then can an actual occasion be a unique individual, diverse and novel from other actual occasions? The universe might easily be a monotonous repetition of identical actual occasions, like a library filled with copies of one book.

The attempted solution of the difficulty lies in the dipolarity of the actual occasion, and the superiority in ontological status of uniqueness versus guidance may account for Whitehead's vacillation over the initial priority of either of the two poles. Logically he is forced to admit the supremacy of the mental pole. Yet he is fully aware that it cannot provide an element of novelty. He therefore desires to speak of the initial priority of the physical pole, the efficient cause, the gift of the past to the present. In this way the world would insure a novel element in each actual occasion.

However, the world cannot of its own accord assure

[1] Ibid., p. 34.

this element of novelty. Whitehead must have recourse to a 'value-category' which can have validity only through God. Whitehead is reluctant to admit the value category as such. Furthermore he does not expressly link it with God as it must be done if it is to stand. But even with the value category we can show that the world and the physical pole cannot provide for an essentially unique element in the actual occasion. Let us see now how the physical world is supposed to provide novelty in each actual occasion:

> The character of an actual entity is finally governed by its datum; whatever be the freedom of feeling arising in the concrescence, there can be no transgression of the limitations of capacity inherent in the datum. The datum both limits and supplies. It follows from this doctrine that the character of an organism depends on that of its environment.[1]

In the above passage we interpret environment to mean the physical world and character to mean the essential element of definiteness. The following quotation is more pointed. It is noteworthy in that there is a frank facing of the difficulty we have mentioned.

> There is nothing self-contradictory in the thought of many actual entities with the same abstract essence; but there can only be one actual entity with the same real essence. For the real essence indicates 'where' the entity is, that is to say, its status in the real world; the abstract essence omits the particularity of the status . . . the real essence involves real objectifications of specified actual entities; the abstract essence is a complex eternal object.[2]

[1] *Ibid.*, p. 168.

[2] Cf. *ibid.*, p. 94.

The argument as it stands without the value category which we shall explicate later collapses for a very good reason. This reason is that according to the relativity principle each objectified actual entity is a potential for every other actual entity.[1] There is "a blurring of the sharp distinction between what is universal and what is particular."[2] Hence objectified actual entities function in much the same way as the eternal objects. Conceivably then, precisely the same objectified actual entities may function in the constitutions of different actual occasions which have precisely the same 'abstract essence.' Thus the physical pole would not have contributed any unique defining characteristic.

The "value category" which we mentioned could be invoked to refute this argument. It is the fifth category of explanation.

> That no two actual entities originate from an identical universe; though the difference between the two universes only consists in some actual entities included in one and not in another, and in the subordinate entities [subjective forms] which each actual entity introduces into the world. The eternal objects are the same for all actual entities. The nexus of actual entities in the universe correlate to a concrescence, is termed 'the actual world' correlate to that concresence.[3]

[1] Ibid., p. 33.

[2] Ibid., p. 76.

[3] Ibid., pp. 33-34.

The fact that Whitehead explicitly acknowledges the universality of the eternal objects in this passage shows that the category is produced just to overcome the difficulty which we are discussing. However this category as stated gives no reason why there should not be two actual occasions arising from the same universe. Moreover it gives no reason why there should not be two identical universes, that is to say, two "actual worlds" that are duplicates for two concrescences. The verbal statement as such stands in need of rationalization. Otherwise it is pure dogmatism apparently invoked to alleviate a difficulty.

We have suggested, however, that it is a "value category." If we interpret it in this way, then it implies that there could be no two actual occasions originating from an identical universe, no two identical 'actual worlds,' and hence no two actual occasions exactly alike because there would be no value in there being two.[1]

In our opinion this category can have validity only if Whitehead links it with God. As he states, in this universe "blind physical purposes reign . . . blind prehensions, physical and mental, are the ultimate bricks of the universe."[2] Apparently without God's help there would be no reason why there shouldn't be any number of duplicates in the world. Thus we find that what was supposed to be the world's contribution to the actual occasion dwindles to mere passivity. God is the benevolent dictator who not only graciously bestows the relevant eternal objects but inasmuch as "there could be no order in the world without his intervention"[1] he also has to see that no two actual occasions prehend the same objectified actual entities.

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[1] Cf. D. H. Parker, op. cit., ch. xv, and passim. Professor Parker frankly admits the Platonic view that value is a universal category.

[2] P.R., p. 470.

The gift by the world to the actual occasion is supposed to overcome the complete domination by God in the creation of the actual entity. However for the gift to be significant it must rely upon a value category. But for the value category to be significant it must in turn rely upon God. Against his will, Whitehead is "God-intoxicated." We sense his longing for the wines of the world.

We stated above that even if the validity of the value category be granted we have an argument that proves that the physical world cannot donate a defining characteristic to the actual occasion. We will grant that no two actual entities can originate from an identical universe. But we can show that from this it does not follow that an actual entity can have a 'real essence' which is its own and not another's. We will grant the particularity

[1] Cf. ibid., p. 377.

of the status and that in virtue of the status the actual entity prehends objectified actual entities that no other actual occasion prehends. But we can show that there can be more than one actual entity with the same real essence. According to Whitehead "the real essence involves real objectifications of specified actual entities."[1] Now let us analyze objectifications. We may do it with Whitehead's own words.

> For the philsoophy of organism the primary data are always actual entities absorbed into feeling in virtue of certain universals shared alike by the objectified actuality and the experient subject (Cf. Part III).[2]
>
> The organic philosophy does not hold that the 'particular existents' are prehended apart from universals; on the contrary, it holds that they are prehended by the mediation of universals. In other words, each actuality is prehended by means of some element of its definiteness. This is the doctrine of the 'objectification' of actual entities.[3]

That Whitehead is quite confident of his theory is exemplified by this addendum to his analysis of objectification: "Thus the primary stage in the concrescence of an actual entity is the way in which the antecedent universe enters into the constitution of the entity in question, *so as to constitute the basis of its nascent individuality*."[4]

[1] *Ibid*., p. 94.

[2] *Ibid*., p. 78.

[3] *Ibid*., p. 230.

[4] Ibid., p. 230. The italics are mine.

Now our dialectical refutation of the doctrine that objectified actual entities can yield a unique unrepeatable real essence should be apparent. For the functioning of objectified actual entities in the real internal constitutions of other actual occasions is resolved into the prehension by the latter of eternal objects in the former. Thus the world donates merely the same abstract essences that God initially does. Since we have already shown that these eternal objects cannot be the basis of a unique individuality Whitehead's theory that the physical pole, or the "real objectifications of specified actual entities" can account for particularity collapses completely.

We find therefore that nowhere in the origin of an actual entity whether that of the mental pole or the physical pole is there a basis for unique individuality.

The weakness in our argument is that Whitehead intends that physical feelings should involve more than the prehension of abstract universals. What this 'more' can be is hard to determine. For this 'more' is explainable only by a complete knowledge of what exists when an objectified actual entity exists. Whitehead's philosophy of organism rules that all contemporary actual occasions happen in causal independence of each other.[1] This means that the actual world of a concrescent process cannot contain other concrescent processes.

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[1] P.R., Part II, ch. ii, Sect. I; Part II, ch. IV, Sect. VIII.

> The contemporary world happens independently of the actual occasion with which it is contemporary. This is in fact the definition of contemporaneousness . . . namely, that actual occasions, A and B, are mutually contemporary, when A does not contribute to the datum for B, and B does not contribute to the datum for A, except that both A and B are atomic regions in the potential scheme of spatio-temporal extensiveness which is a datum for both A and B.[1]

This part of Whitehead's philosophy thus rules out the possibility of the physical feelings prehending into the concrescent process any other concrescent processes. Since Whitehead seems to consider process as the only actuality the physical feelings are prohibited from prehending other actualities. If Whitehead were to contend that objectified actual entities were bonafide actualities then he would be rather close to supporting a doctrine of substance. For objectified actual entities, are dead, perished, static; yet they are permanent and enduring like the eternal objects and enter into the consitution of nascent concrescences in much the same way.[2] The only difference apparently is that the eternal objects ingress through conceptual feelings and the objectified actual entities ingress through physical feelings.

Our point is that Whitehead faces a dilemma. Either he has to admit that the physical feelings of objectified

[1] Ibid., p. 188.

[2] Ibid., pp. 66; 71; 79.

actual entities can be reduced to prehensions of universals or he has to give the objectified actual entities a status close to that of an enduring substance. For the notion of enduring objects or of thinghood he takes the former alternative. This will be shown in the succeeding section. But he tries to overcome the inherent weakness by giving the objectified actual entities the status of enduring forces or powers. Thus the objectifications are more than embodied universals.

> One actual entity has a status among other actual entities, not expressible wholly in terms of contrasts between eternal objects. For example, the complex nexus of ancient imperial Rome to European history is not wholly expressible in universals. It is not merely the contrast of a sort of city, imperial, Roman, ancient, with a sort of history of a sort of continent, sea-indented, river-diversified, with alpine divisions, begirt by larger continental masses and oceanic wastes, civilized, barbarized, Christianized, commercialized, industrialized. The nexus in question does involve such a complex contrast of universals. But it involves more. For it is the nexus of *that* Rome with *that* Europe. We cannot be conscious of this nexus purely by the aid of conceptual feelings. This nexus is implicit, below consciousness, in our physical feelings.[1]

In this passage there is an appeal to our sensing of particularity rather than an explanation of how the particularity can have ontological foundations. It is still difficult to comprehend just what these 'visceral feelings'[2] are prehending beyond the universals. For to feel something more than the universals, yet something which is not a process gives rise to doubts about the non-substantiability of the philosophy of organism. That Whitehead wants the physical feelings of efficient causation to involve more is manifestly evident. Perhaps it is in the need for an ontological basis of physical causation that a philosophy of process is inadequate. Whitehead complicates his problem by making the contemporary world causally independent. Thus the conceivable causal efficacy of other processes is rendered null. For causation then he needs a permanence other than the universals but which his general metaphysical doctrine prohibits.

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[1] *Ibid*., p. 350. The italics are his.

[2] *Ibid*., p. 184.

For the individual concrescence, or the individual subject-superject, or the individual actual occasion we have found a principle of guiding concretion in the mental pole. Whitehead admits that this abstract essence is not necessarily unique. Supposedly the physical pole offers a principle of unique particularity. We have stated that the physical feelings could be rendered in terms of prehensions of eternal objects. Thus we were led to conclude that Whitehead has no principle to account for unique individuality in the multiplicity of the actual occasions of the world. Whitehead's only alternative could be the appeal to the 'feeling of the more than universals' which he has never completely explained. In the following section on the self we shall see that he renders the physical feelings in terms of eternal objects just as we have done. Hence there is no basis for individuality in his philosophy.

SECTION III. THE SELF

Selfhood is a one-many relation. There are many subjects which make one enduring object. The self is that thread of identity present in each moment of the enduring object's existence. The self is not something above or transcendent to the string of actual entities composing the endurant. Rather it is embodied in each of the subjects contributing to the endurance. Let us examine how personal identity is explained by Whitehead. In this examination it will be evident that Whitehead fails to provide for the unique individuality of the self.

According to Whitehead, the existence of an enduring object, whether a stone or a person, consists of a discrete succession of actual occasions, each as it arises totally replacing its successor as its perishes. This string of discrete occurrences forms an enduring object for two reasons. First the string of events forms a nexus which is a 'society.' Secondly, the succession of events which is the nexus or society is 'serially ordered.' The nexus is a society when (i) there is a common element of form exemplified in each member of the nexus, and (ii) this common form arises in each member by its prehensions of some other members of the nexus, and (iii) these prehensions impose that condition of reproduction by reason of their inclusion of positive feelings of that common form. This common element of form is the 'defining characteristic' of the society and "is simply a complex eternal object exemplified in each member of the nexus."[1]

The 'serial ordering' of the nexus means that the eternal object or defining characteristic is inherited throughout the nexus, each member deriving it from other members of the nexus which are antecedent to its own concrescence.

> By this 'serial ordering' arising from the genetic relatedness, it is meant that any member of the nexus--excluding the first and the last, if there be such--constitutes a 'cut' in the nexus, so that (a) this member inherits from all members on one side of the cut, and from no members on the other side of the cut, and (b) If A and B are two members of the nexus and B inherits from A, then the side of B's cut, inheriting from B, forms part of the side of A's cut inheriting from A, and the side of A's cut from which A inherits forms part of the side of B's cut from which B inherits. Thus the nexus forms a single line of inheritance of its defining characteristic. Such a nexus is called an 'enduring object.'[2]

What we are primarily concerned with in the passage above is the transmission of the eternal object throughout the life history of the enduring object. Yet the passage is remarkable for the metaphysics of time which it portrays. Here there is the unmistakable asymmetry of time with its one way direction and its cumulative effect. As Whitehead points out a set of mutually contemporary occasions cannot form a complete society.[1] The genetic conditions cannot be satisfied by such a set of contemporaries. The society must involve antecedents and subsequents; succession is the peculiar quality of endurance. Time is the one way process descriptive of endurance. The cited passage of Process and Reality seems to me to be contradicted by the view held in The Adventures of Ideas of the existence in the present of the past and the future.[2]

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[1] Ibid., p. 51; cf. A.I., pp. 260-63.

[2] Ibid., p. 51; cf. A.I., pp. 260-63.

Another aspect of his theory of time is that the becoming is the becoming of the individual actual entities which form the series. The temporal experience is thus a succession of individual becomings. A whole string of events may not be a single act of becoming as is the case with Bergson.[3] The importance of this observation is that it rules out the possibility of attributing subjective aim to a nexus *in toto*. Lloyd Morgan thinks it non-sensical to talk about subjective aim in the individual atomic occasions. But he can conceive of an animal, or the whole life history of a man being endowed with subjective aim.[4]

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[1] A.I., p. 261.

[2] Op. cit., ch. xii, especially p. 250.

[3] Cf. H. Bergson, Introduction to Metaphysics (New York and London: Macmillan and Company, 1912).

[4] Cf. C. Lloyd Morgan, "Subjective Aim in Professor Whitehead's Philosophy," The Journal of Philosophical Studies, VI (1931), 281-94.

Our point is that such a thing is impossible in the context of Whitehead's theory of becoming. The 'life plan' of a society must be explained solely in terms of the individual entities constituting the nexus.

However we may for the moment overlook the metaphysics of time which Whitehead's theory involves. It is an interesting side issue which is not completely relevant. For we are trying to prove that the enduring objects 'exist' in virtue of inherited eternal objects which themselves do not change. Let us notice a concrete example of an enduring object.

> For example, the life of man is an historic route of actual occasions which in a marked degree--to be discussed more fully later--inherit from each other. That set of occasions, dating from his first acquirement of the Greek language and including all those occasions up to his loss of any adequate knowledge of that language, constitutes a society in reference to knowledge of the Greek language. Such knowledge is a common characteristic inherited from occasion to occasion along the historic route. This example has purposely been chosen for its reference to a somewhat trivial element of order, viz. knowledge of the Greek language; a more important character of order would have been that complex character in virtue of which a man is considered to be the same enduring person from birth to death. Also in this instance the members of the society are arranged in a serial order by their genetic relations. Such a society is said to possess 'personal order.'[1]

What Whitehead's conception of personal identity amounts to is a theory of the objectification of actual entities. Through hybrid physical feelings the eternal objects embodied in the respective actual entities are transmitted to each succeeding actual entity throughout the whole series. These eternal objects define the nature and the personality of the enduring object. This of course carries our point that the physical feelings of objectified actual occasions can be reduced to feelings of eternal objects. Since there is no basis for the individuality of a single actual occasion there is no basis for the personal individuality of enduring objects. Without a doubt the same eternal objects do ingress in other series of actual occasions.

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[1] P.R., pp. 137-38.

A point which should not be overlooked is that according to this theory of objectification the 'self' is identifiable with the physical poles of the actual occasions forming the series that is the ordered society. This means that each moment of the self or each subject of the self is free as far as the mental pole is concerned. Moreover, in accord with Whitehead's general metaphysical theory, God has to intervene at each moment of the self's life history to donate the mental pole. The identity of selfhood is peculiarly physical rather than mental. Of course there may be continuity between the mental states of the various subjects by the mental pole prehending the activities of the preceding mental pole. However, if the subjective aim were not such that it would be interested in prehending the antecedent mental states then continuity of consciousness would not follow. Thus God must be careful to note that each subjective aim he donates to the various subjects of the life history of a person should be interested in what has happened before.

Our interpretation can be defended by an appeal to Whitehead's presuppositions. However it is only fair that we point out what he wishes us to understand by his theory. He would like to minimize the successive acts of God and account for the unity inherent in the subjective aims of the diverse moments of the self by an appeal to less supernatural forces. He does this by the introduction of a categorial obligation.

> (viii) The Category of Subjective Intensity. The subjective aim, whereby there is origination of conceptual feeling, is at intensity of feeling (α) in the immediate subject, and (β) in the relevant future.
>
> This double aim--at the immediate present and the relevant future--is less divided than appears on the surface. For the determination of the relevant future, and the anticipatory feeling respecting provision for its grade of intensity, are elements affecting the immediate complex feeling.[1]

In this category we see that each subjective aim in a sense determines what its succeeding subjective aim is to be like. Thus we are allowed the obvious inference that any subjective aim is determined by its predecessor. Hence the unity of subjective aims is accounted for in the diverse moments of the enduring object.

However the doctrine gets Whitehead into trouble. Because a concrescent process is composed of feelings and if there are prehensions of the future, then the future must exist in the present. This he holds. "It is evident that the future certainly is something for the present . . . cut away the future, and the present collapses, emptied of its proper content. Immediate existence requires the insertion of the future in the crannies of the present."[1] Now it seems to me that this view is a flat contradiction of what an enduring object is. We may recall the asymmetrical relation of inheritance. "This member inherits from all members on one side of the cut, and from no members on the other side of the cut."[2] To account for the similarity of subjective aims Whitehead has to define an enduring object in terms of inheritance from both sides of the "cut."

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[1] *Ibid.*, p. 41.

> Thus the future is to the present as an object for a subject. It has an objective existence in the present. . . What is objective in the present is the necessity of a future of actual occasions, and the necessity that these future occasions conform to the condtions inherent in the essence of the present occasion. The future belongs to the essence of present fact, and has no actuality other than the actuality of present fact. But its particular relationships to present fact are already realized in the nature of present fact.[3]

Here we seem to have discovered certain fundamental inconsistencies in Whitehead. However, we are reminded that if Whitehead were only willing to let God play the benevolent omniscient role he would not need to contradict himself. Furthermore, we believe that the alternative theory of time is not as satisfactory as the one-way, accumulative, asymmetric theory given in Process and Reality. Whitehead's general metaphysics stands in need of some reworking.

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[1] A.I., p. 246.

[2] Cf. P.R., p. 51. Also see above.

[3] A.I., p. 246.

Another consequence of Whitehead's metaphysical position, this time a not unhappy result, is that it readily explains how two subjects can think the same thoughts. Literally, it can be said that they have the same mind. For the physical pole supposedly contributes the element of unique individuality. The mental pole or the abstract essence admittedly can be present in other concrescences. "The abstract essence is a complex eternal object. There is nothing self-contradictory in the thought of many actual entities with the same abstract essence."[1] This means that two different selves or persons could at one moment of their existence have an identity of content of mind. This of course has implications for a theory of communication.

A summary statement of this section might be the conclusion that we do know what the self is but that there still remain two difficulties. First, we can find no guarantee of the uniqueness of the self. Second, there is no adequate explanation of the continuity of the mental

[1] Ibid., p. 94.

states of the self. In fact the self is essentially physical, bound up in the physical pole, the gift of the physical world of objectified actual entities to the present subject-superject of the enduring object. The self is simply the defining characteristic present in all the various subjects of the life history of the endurant. It is not unique because it is composed of eternal objects; it cannot account for continuity of thought because thought originates from the mental pole.

However, in all fairness to the dipolarity of the discrete subject-superject, the physical pole or essential self must be admitted as exercising some effect in all the varied moments of mental activity.

SECTION IV. MIND

Although we have at times spoken of the mental pole and of mental activity, even of thought, it should be remembered that Whitehead's conception of experience repudiates a philosophical tradition. The repudiated tradition is that the basic elements of experience are to be described in terms of consciousness, thought, and sense-perception. According to Whitehead these three components are unessential elements in experience, either physical or mental. When consciousness, thought, and sense-perception arise, if they arise at all, they belong to the derivative 'impure' phases of high grade concrescences.[1] Thus while it is obvious that the mental pole or subjective aim is "the germ of mind"[2] we are reminded that as yet we have not discussed the nature of the mental activity operative in thinking and communicating. In this section we propose to discover merely what mind is like.

In the actual world Whitehead discerns four grades of actual occasions, grades which he insists are not to be sharply distinguished from each other.

> First, and lowest, there are the actual occasions in so-called 'empty space,' secondly, there are the actual occasions which are moments in the life-histories of enduring non-living objects, such as electrons or other primitive organisms; thirdly, there are the actual occasions which are moments in the life-histories of enduring living objects; fourthly, there are the actual occasions which are moments in the life histories of enduring objects with conscious knowledge.[3]

Now two points seem to stand out. First, that mind is to be found around the mental pole; second, that mind is to be found only in the various moments of the life-history of enduring objects. Thus it is that the mentality we seek is essentially to be found in an analysis of actual occasions existing in 'societies.' Accordingly our present investigation is concerned with the hierarchy of societies. A point not to be overlooked however, is that society is a derivative notion. The completely real things are the individual actual occasions or actual entities. We reiterate that the whole string of events is not a single act of becoming. There exist only the individual becomings. Thus in this discussion of 'mind' we are reminded of the relevance of the poorly solved problem of the relationship to each other of the mental poles of the successive actual occasions.

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[1] Cf. P.R., p. 54.

[2] Ibid., p. 130.

[3] Ibid., p. 267.

Whether the lowest grade actual occasions, those that exist in so called 'empty space', can properly be said to exist is a matter of conjecture. However, if they do exist, they exist in a nexus for an 'empty space' provided it is a space in something else, say a cell, is a nexus.[1] As for the other three grades of actual occasions which Whitehead mentions he has a hierarchy of societies into which they fit. These three societies are worked out according to the dominance of the physical pole, the mental pole, or the successful fusion of the two in the individual actual occasions composing the societies:

(1) Societies that are enduring non-living objects, such as electrons; or of the type of "crystals, rocks, planets and suns."[2] Here there is dominance of efficient causation or of the physical pole. Massive stability

[1] *Ibid.*, p. 152.

[2] *Ibid.*, p. 154.

eliminates the detailed diversities and irons out the novelty of the mental pole.

(2) Societies that are enduring living objects; or of the type of the lower organisms, marked by originality of response. This is Whitehead's definition of life: "A single occasion is alive when the subjective aim which determines its process of concrescence has introduced a novelty of definiteness not to be found in the inherited data of its primary phase."[1] Here there is dominance of final causation. But since "life is a bid for freedom"[2] the subjective aim introduces novelty to meet the data of the environment. As it were, there is reaction or response to the stimuli.

(3) Societies that are enduring objects with conscious knowledge; or of the type of the higher organisms, which find means of transmitting the originality of one occasion to succeeding occasions.

The defining characteristic of a living person is some definite type of hybrid prehensions transmitted from occasion to occasion of its existence. The term 'hybrid' is defined more particularly in Part III. It is sufficient to state here that a 'hybrid' prehension is the prehension by one subject of a conceptual prehension, or of an impure prehension, belonging to the mentality of another subject. By this transmission the mental originality of the living occasions receives a character and a depth. In this way originality is both 'canalized'--to use Bergson's word--and intensified. Its range is widened within limits. Apart from canalization, depth of originality would spell

[1] *Ibid.*, p. 159.

[2] *Ibid.*, *loc. cit.*

disaster for the animal body. With it, personal mentality can be evolved so as to combine its individual originality with the safety of the material organism on which it depends. Thus life turns back into society: it binds originality within bounds, and gains the massiveness due to reiteration.[1]

Apparently hybrid prehensions account for the phenomena of learning and memory and it would seem that it is this function which "binds originality within bounds, and gains the massiveness due to reiteration." Here again there is dominance of the mental pole; but in a sense there is a fusion of the mental pole with the physical pole. In fact the continued existence of life among the high-grade, delicately structured organisms depends upon the successful balancing of the mental with the physical. Life is a bid for freedom, yet it turns back into the society. Whitehead traces this pattern in the phases of living occasions thus: "Life is a passage from physical order to pure mental originality, and from pure mental originality to canalized mental originality."[2] And in complete accord with his general cosmological doctrine Whitehead introduces God at this point. "It must also be noted that the pure mental originality works by the canalization of relevance arising from the primordial nature of God. Thus an originality in the temporal world is conditioned, though not determined, by an initial subjective aim *supplied by the ground of all*

[1] *Ibid.*, p. 163.

[1] *Ibid.*, p. 164.

order and of all originality."[1]

There is a gradation of difference in the originality generated by the mental poles of type two and type three. "In the case of the higher organisms, this conceptual initiative amounts to thinking about the diverse experiences; in the case of the lower organisms this conceptual initiative merely amounts to thoughtless adjustment of aesthetic emphasis in obedience to an ideal of harmony."[2]

Thus we see that at this point we have arrived at the type of mentality with which we propose to deal. Mind is a part of nature just as physical stability is a part. In this sense there is a "psychophysical duality" in Whitehead's position but not a "psychophysical dualism." There is no dualism in nature because of the essential dipolarity of every actual occasion. Mentality is part of the activity of prehending which constitutes any actual occasion.[3] Nor is there dualism within each actual occasion. Rather there is essential dipolarity or duality. For the subject-superject is the substantive constituted by the mental and physical prehensions. There is no "substance" with two attributes. The single actuality has two aspects inextricably intertwined. According to categorial obligations (iv) and (v) conceptual feelings pass into physical feelings and conversely physical feelings give rise to conceptual feelings. Also conceptual feelings give rise to other conceptual feelings which brings us again to the realm of conscious mentality. Having located mind in nature we may hereafter devote our attention to the highest type of mentality, human consciousness.

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[1] Ibid., p. 164. The italics are his.

[2] Ibid., p. 155. The italics are mine.

[3] Ibid., p. 366.

Although Whitehead's panpsychism delivers him from the dualism of *rēs* *cogitans* and *rēs* *extensa* there is still a Cartesian dualism which he must explain. That is the mind-body problem. For the human body is composed of many strands of actual occasions which define many enduring objects. Apparently the enduring object which is my brain has authority over the enduring object which is the hand grasping the pen as I write. In fact, what is the "I" referred to in the sentence above? Whitehead's solution is amazingly simple if not entirely convincing. We may arrive at the notion of a ruling mind by noting another hierarchy of societies which Whitehead constructs in *Modes* *of* *Thought*.[1] There he states that in nature we find four types of aggregations of actualities:

(1) The non-living aggregation, the lowest, in which there is no individual expression in its parts. "The inorganic is dominated by the average."

(2) The vegetable grade which exhibits "a democracy

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[1] *Op*. *cit*., pp. 38-39.

of purposeful influences issuing from its parts." There is a difference between the vegetable grade and lifeless matter for what was merely latent potentiality in lifeless matter has awakened into some realization in the vegetable. "But in each instance of vegetation, the total bodily organism strictly limits the individuality of expression in the parts."

(3) The animal grade which includes at least one central actuality supported by the intricacy of bodily functioning. Here there is a decline of democracy.

(4) The human grade of animal life which immensely extends the concept of one dominating actuality. "The distinction between men and animals is in one sense only a difference in degree. But the extent of the degree makes all the difference. The Rubicon has been crossed."[1] Here, in the human body there is aristocracy and often despotism.

Thus we see that the mind body problem is resolved into the problem of the authority of a dominant actuality at one instance of the life history of man. The enduring object formed by the succession of ruling actual occasions would be the stream of consciousness which we often refer to as 'mind.' Whitehead expresses his theory of the problem in his own inimitably confusing way:

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[1] *Ibid.*, p. 38.

> Thus in an animal body the presiding occasion, if there be one, is the final node, or intersection, of a complex structure of many enduring objects. Such a structure pervades the human body. The harmonized relations of the parts of the body constitute this wealth of inheritance into a harmony of contrasts, issuing into intensity of experience. The inhibitions of opposites have been adjusted into the contrasts of opposites. The human mind is thus conscious of its body inheritance. There is also an enduring object formed by the inheritance from presiding occasion to presiding occasion. This endurance of the mind is only one more example of the general principle on which the body is constructed. This route of presiding occasions probably wanders from part to part of the brain, dissociated from the physical material atoms. But central personal dominance is only partial, and in pathological cases is apt to vanish.[1]

In this chapter we have dealt with the subject, the self, and the mind as they are portrayed within the framework of Whitehead's categorial scheme. We have noted that despite the evident tendency to panpsychism in Whitehead there are gradations of actual occasions and gradations of enduring objects. This gradation of actual occasions holds despite the fact that "the presumption that there is only one genus of actual entities constitutes an ideal of cosmological theory to which the philosophy of organism endeavours to conform."[2] We have been dealing with the generic characters of all entities. The specific differences with which we are concerned, thought and language, occur only in the highest grade actual occasions. Hereinafter we shall deal primarily with the human level of

[1] __P__.__R__., pp. 166-67.

[2] __Ibid__., p. 168.

existence. The adequacy or inadequacy of Whitehead's metaphysical foundations to explain the higher phases of experience will then be made manifest.

CHAPTER IV

THOUGHT

SECTION I. PREFATORY

In this chapter we are concerned with thought. The discovery of its nature is the goal of this discussion. Thus the preliminary question before us is not 'What is thought?' but 'What do we mean by thought?' In this chapter we take thought to be one of the highest type activities of human organisms. As we use the term it is synonymous with reason, reflection, speculation. Or if linked with perceptual knowledge it is what Whitehead calls conceptual analysis, that stage in the perceptive process immediately superior to perceptions in the pure modes of causal efficacy and presentational immediacy.[1] In fact, in this chapter we are dealing with the very type of activity which produces a categorial scheme. Thought constructed Whitehead's categorial scheme and now, within the framework of the scheme, we seek an explanation of thought. Thus there is some circularity in our investigation, or rather we demand that Whitehead be circular in his metaphysics. We contend that this is a necessary difficulty of all metaphysics. It is accentuated in Whitehead's philosophy because of his use of the schematic method. The categorial scheme if adequate and applicable must explain every element of experience. Hence it must explain its own process of origination. We propose to see how metaphysical cognition is grounded in the nature of things--how it arises naturally as an adjunct within the totality of experience that constitutes the universe.

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[1] Cf. Symbolism, pp. 17-18.

It is clear that our quest is more than the usual analysis of perception, truth, and error. It involves all of these but it goes a step beyond. Whitehead's epistemology admittedly is based on an appeal to ontology.[1] We are extending his metaphysical method. Speculation is a part of nature in the same way that perceptive knowledge is a part of nature. Within the framework of the categorial notions we propose to investigate its origin and the validity of its claim to truth.

Thought is a function of mind. In the preceding chapter we have noted that mentality is a part of nature. Whitehead's essentially pan-psychistic view stands in marked contrast to all types of Cartesian dualism, whether idealistic or realistic. It also must be distinguished from the functional view of the pragmatists. On the

[1] *P.R.*, p. 288.

pragmatic position, mentality is the characteristic of experience performing in a certain functional role, and not a characteristic of experience in itself. Experience as bare giveness is neither mental, psychical, nor subjective. In fact what this 'experience' can be is hard to comprehend unless we equate it with the totality of existent nature. However in problematic situations where the reacting organism is otherwise unable to effect an adjustment mental functions arise, portions of experience become ideas or symbols, instruments or tools by means of which the organism controls its world and itself.[1]

For Whitehead mentality is a real characteristic of experience. It is structured in the very nature of all actual occasions; there is the duality of the mental pole and the physical pole. However only in the high grade actual occasions that are moments in the life histories of human beings does mentality achieve the complexity of activity that we call intellectual functioning. In this chapter then we are concerned with an analysis of the nature of high grade actual occasions. It is around the now familiar notions of conceptual feeling, physical feeling, and subjective aim that we must construct our categorial description of the activities of the human mind.

[1] Cf. John Dewey, Essays in Experimental Logic (Chicago: University of Chicago Press, 1916), pp. 226-29; Experience and Nature (Chicago: Open Court Publishing Company, 1925), p. 290, and passim.

When we propose to start within the framework of ideas given in the categorial scheme and work out a conception of human mentality we find that we must face a problem thus far ignored. This problem is that Whitehead's procedure was essentially to give a comprehensive description of human experience, and then to take this description as the key to the nature of all reality. Whitehead writes: "In describing the capacities, realized or unrealized, of an actual occasion, we have, with Locke, tacitly taken human experience as an example upon which to *found the generalized description* required for metaphysics."[1] In another passage he attributes this method to Descartes. "Descartes laid down the principle, that those substances which are the subjects enjoying conscious experiences, provide the primary data for philosophy, *namely, themselves as in the enjoyment of such experience* . . . In this doctrine Descartes undoubtedly made the greatest philosophical discovery since the age of Plato and Aristotle."[2] The metaphysical generalization of Descartes principle and of Locke's empiricism results in Whitehead's subjectivist principle: "That apart from the experiences of subjects there is nothing, nothing, nothing, bare nothingness."[3]

[1] *P.R.*, p. 172.

[2] *Ibid.*, p. 241. The italics are mine.

[3] *Ibid.*, p. 254.

This knowledge of Whitehead's procedure is the key to much of his philosophy. Since he hides it so well it might be termed "the secret of Whitehead." Certainly his generalization of human experience is the foundation of his appeals to Locke and Hume for support of his doctrine. For example, "the terms 'prehension' and 'feeling' are to be compared with the various significations of Locke's term 'idea'."[1] Also "Hume, in effect, agrees that 'mind' is a process of concrescence arising from primary data."[2] Yet again in a striking critique of Locke's Essay Concerning Human Understanding:

> He should have widened the title of his book into 'An Essay Concerning Experience'. His true topic is the analysis of the types of experience enjoyed by an actual entity. But this complete experience is nothing other than what the actual entity is in itself, for itself . . . Locke talks of 'understanding' and 'perception'. He should have started with a more general neutral term to express the synthetic concrescence whereby the many things of the universe become the one actual entity. Accordingly I have adopted the term 'prehension', to express the activity whereby an actual entity effects its own concretion of other things.[3]

Thus it seems that the historical foundation of much of Whitehead's philosophy is extremely shaky. For much of his historical sources is nothing but seventeenth and eighteenth century psychology.

But now we face the fact that Whitehead's 'speculative empiricism'

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[1] Ibid., p. 37.

[2] Ibid., p. 78.

[3] Ibid., p. 81.

empiricism' is an initial conception of human experience which is read off ontologically. If ontology is a generalized description of human experience, can there be any logic in seeking to discover the nature of human experience by an appeal to ontology? The answer to this question must be in the affirmative. For the initial insights were unschematized and hence unrelated to the other factors constituting the whole of nature. This is why Whitehead found it necessary to stress the importance of a frame of reference for our ideas. Within the categorial scheme the initial insights into the nature of experience are clarified and refined in virtue of their coherence with all the related notions of causality, space-time, and perception. Structuring experience in an ontological context brings out latent ideas and new possibilities heretofore unnoticed. Thus the starting-point of philosophy is again considered as an element within the finished product. Human experience within the framework of the categorial scheme will have been deepened and more adequately explained. The notion of the importance of the schematism of ideas justifies the re-evaluation of experience within the scheme.

If it be granted that though Whitehead's ontology is based on an analogy to human experience we can still hope to obtain additional insight into the nature of human experience by an appeal to ontology, there yet remains a further question. What justification is there for conceiving all of reality to be like that found in human experience? Idealists justify this procedure by relying upon an 'indefeasible intuition,' namely, "That in experience we are acquainted with the stuff of reality, as directly acquainted with it as we are with the taste of a lemon when we suck it; so that to exist and to be a center of experience, or an element of a center, are one and the same, and cannot be other than one and the same."[1]

We see that the question of the validity of reading human experience into nature might easily involve us in the age-old dispute between the idealists and the realists. However we can face the question and limit ourselves to a consideration of Whitehead's philosophy in independence of the wrangles between schools of thought. Whitehead has at least three good reasons why he should adopt such a procedure. First, the example set by Descartes, that since we must begin philosophy somewhere we should begin with ourselves. Secondly, since we are impressed with the "obvious solidarity of the world" we can assume that all reality is as we are. "The presumption that there is only one genus of actual entities constitutes an ideal of cosmological theory to which the philosophy of organism endeavours to conform."[1] Thus to speak of all reality in terms derived from human experience is to give a coherent, unified account of nature. If it be argued that Whitehead's ontological categories are unnecessarily anthropomorphic then there is always the counter charge that the materialistic concepts of science are unnecessarily de-anthropomorphic in their treatment of the nature of man.

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[1] Cf. Parker, op. cit., p. 48.

Whitehead's third reason for his procedure is the appeal to the speculative element present in all philosophic endeavor. Philosophy is descriptive generalization in which we seek to gain some synoptic vision. As such our generalized descriptions are working hypotheses. "Metaphysical categories are not dogmatic statements of the obvious; they are tentative formulations of the ultimate generalities."[2] Therefore the final criticism of the generalization of human experience into ontological categories must be an appeal to the facts. Are the categories adequate, applicable, necessary, universal? If they apply successfully to the fields of physics, chemistry, psychology, and the like then they have been validated. If the categories fail to have empirical application then they are wrong.

On this view Whitehead's categories may be wrong for two reasons. First, Whitehead's procedure of reading human experience into nature may not be the proper method of philosophy. Perhaps what should be stressed is epistemology in which we endeavor to discover the nature of things known. The problem is not what we are like but what we can know. What is there in causal nature that affects us as it does? This is the attack usually made by critics who follow the realistic tradition. The second reason that Whitehead's categories may be incorrect is not that his procedure is wrong, but that he errs in the initial description of the essential factors of human experience. Thus 'empirical idealists' would be inclined to agree that "the elucidation of immediate experience is the sole justification for any thought; and the starting point for thought is the analytic observation of components of this experience."[1] But Locke, Berkeley, Hume, James, Bergson, and Parker doubtless would not agree that "experience involves a becoming, that becoming means that something becomes, and that what becomes involves repetition transformed into novel immediacy."[2] For such a description of experience entails a fluid subject emergent from the becoming process and hence the complete rejection of subject-predicate categories. Subject-predicate categories are as dear to the idealists as they are to the realists. Thus Whitehead stands alone, the subject of a double-barreled attack from realists and idealists alike.

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[1] *P.R.*, p. 168.

[2] *Ibid.*, p. 12.

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[1] P.R., p. 6.

[2] Ibid., p. 207. The italics are his.

Our procedure in this thesis has been this: to work out the implications of the categorial notions for a theory of human experience. In this respect we have paid little heed to the origin of the categorial notions. Our sole problem is to test the adequacy and the applicability of the metaphysical concepts to the fact of enduring human beings engaged in thought and communication. Hence the preceding chapter was dewoted to selfhood and mentality, this chapter to the intellectual functioning of mentality, the succeeding chapter to language. If we find that the categorial notions fail to provide an adequate explanation of human activity then the problem could arise as to the probable cause of the inadequacy. There could then be the question of error of procedure, or correctness of procedure but error in the description of the observable facts of experience. But that discussion might easily take us far beyond the scope of our thesis. We have chosen to work *within* the categorial scheme because most critics have been complacently content to work without.

Already we have noted difficulties involved in the notion of an emergent subject-superject as the primary entity of nature. Individuality has not been accounted for in a satisfactory manner hor has there been a clear cut explanation of the continuity of an enduring object that harbors a 'self.' In this chapter we continue our thesis with an investigation of the nature of high-grade actual occasions resident in the brain of human organisms. But a new point is now made clear. If the welter of categorial notions--physical feelings, conceptual feelings, subjective aim, determinate satisfaction, etc., cannot account for a satisfactory explanation of human mentality then Whitehead's entire philosophy is in jeopardy. For the ontology itself is a generalized description of the supposed factors of human experience. Be it granted that in experience we are directly acquainted with the stuff of reality; then if the categorial account of experience is inadequate the philosophy as a whole is inadequate. There is thus this curious feature about the idealistic position when coupled with the schematic method; the categorial scheme as a whole succeeds or fails on the one point of the explanation of the higher phases of human activity.

SECTION II. CONSCIOUSNESS

Mentality we have noted is a generic aspect of all experience. However consciousness in Whitehead's philosophy occupies a subordinate metaphysical position.[1] Consciousness, thought and sense-perception are held to be unessential elements in experience, either physical or mental.[2] Consciousness is a subjective form in the higher phases of concrescence.[3] Consciousness is the crown of experience, only occasionally attained, not its necessary base. "Consciousness flickers; and even at its brightest, there is a small focal region of experience of clear illumination, and a large penumbral region of experience which tells of intense experience in dim apprehension."[4]

We emphasize that while mentality is at the base of all consciousness, consciousness itself is reserved for the intermittent moments of wakeful attention in the life-history of man. Since our discussion of consciousness is to be couched in categorial terms we must dissect our old friend, the actual occasion.

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[1] *Ibid.*, p. 211.

[2] *Ibid.*, p. 54.

[3] *Ibid.*, p. 246.

[4] *Ibid.*, p. 408.

The fundamental structural pattern of experience is the subject-object relation. But this does not necessarily imply that the subject-object relation is identical with the knower-known relation.[1] This is precisely the point we have been making in regard to consciousness. The subject-object relation can become a conscious relation or a knowing relation only when there is a peculiar complexity in the constitution of the actual occasion which is on the subject end of the relation. This we shall point out. Now we must analyze the subject-object relation which is the basic pattern of experience. On the subject end of the relation we find the concrescent actual occasion, the emerging subject-suprject. This subject-superject is essentially dipolar, having a physical pole and a mental pole. The physical pole accounts for the element of unique individuality while the mental pole provides the subjective aim which is the principle of guidance and of concretion. It accounts for the direction of the growth of the concrescence. Also we are told that the physical pole is the gift of the world while the mental pole is donated by God. On the object end of the relation we find four main types of things: eternal objects, propositions, objectified actual entities and nexūs. These 'objects' are also referred to as 'data.' All four of these types belong in the category of existence

[1] A.I., p. 225.

and we have dealt with them at length in the preceding chapters.

Thus far there is little difficulty in comprehending the basic pattern of experience. The subject-object relation makes sense. However when we begin to analyze the 'relation' existing between the subject and the object we reach the core of Whitehead's abstruse metaphysical doctrine. It is here that we find fundamental difficulties. A sympathetic analysis reveals (a) that the relation 'between' the subject and the object is a feeling or a prehension.[1] (b) That the relation or prehension or feeling is a real part of the constitution of the subject. (c) That apart from the many feelings which the subject has there exists absolutely nothing in the form of a subject. (d) That the many feelings constitute the subject and that in this sense the subject-superject never really 'exists' until the concrescent process of feeling has been completed. The subject-superject is the totality of unified feelings organized into the one actual occasion.

Such a theory which succeeds, at least verbally, in putting the subject of an act of experience into fluid process faces several difficulties. First, that while we have spoken of a physical pole and a mental pole these of course must be construed as mere abstractions from the fact that there are two basic kinds of feelings: physical and mental. Thus the poles as such have no independent existence. What is it, then, that *begins to feel*? In Section III of the preceding Chapter we proved that eternal objects, transmitted from past actual occasions constituted the enduring 'self' of the organism. On that view the initial subject which *begins to feel* could be those eternal objects. That makes a little sense but it is not in keeping with Whitehead's doctrine of the subject-superject being nothing more than its feelings of eternal objects and the other types of data. Whitehead can only maintain that there are eternal objects transmitted, i.e., *given* as possibilities for feelings. What could possibly *begin* to feel them remains a mystery.

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[1] Whitehead usually identifies the terms 'prehension' and 'feeling.' However he never uses the term 'negative feeling.' See P.R., pp. 65; 66; 377.

It will be noticed that the above criticism stressed the fact that there was no experient to receive the 'gifts' from God and the world. Once the process is begun, Whitehead has the emerging subject-superject, or the growing unity of feelings, or the internal constitution of the actual occasion to act as the 'feeler' or the experient subject. Thus if the process is once begun Whitehead's evanescent subject-superject theoretically can account for the obvious need of a subject to place on the subject end of the subject-object relation. However this does not solve a second difficulty which Whitehead's theory encounters. If the subject-superject be no more than its many feelings then there is the identification of causation with all the feelings of the concrescence. "As a simple example of this description of a feeling, consider the audition of sound. In order to avoid unnecessary complexity, let the sound be one definite note. The audition of this note is a feeling. This feeling has first an auditor, who is the subject of the feeling. But the auditor would not be the auditor that he is apart from this feeling of his."[1] Now it seems to me that there is some measure of truth in this but the generalization of this measure of truth into a metaphysical doctrine distorts the truth. Whitehead's categorial version of the principle is stated thus: "A simple physical feeling is the most primitive type of perception."[2]

Perhaps it is trivial to remark that the subject who heard the tone and the subject who judged the tone to be melodious or harsh were not one and the same. Or that the subject who sees the red rose is not the subject-superject who decides the rose to be beautiful. Whitehead wants it that way. But it seems that the general identification of Causation with feeling, and the identification of the actual entity solely with feeling, present a real difficulty for any coherent explanation of the activity we constantly are aware of in acts of cognition, judging and thinking.

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[1] P.R., p. 357.

[2] Ibid., p. 361, also cf. p. 91.

In our analysis of the subject-object relation which is the structural pattern of experience we have noted several difficulties. However, it is clear that if we expect to find an explanation of consciousness we must look for it in the relation of feeling. For the subject has dissolved completely into feelings. All the activities of human experience will be explained in terms of the various permutations and transmutations of feeling. Thus it might be said that we are concerned with the hierarchy of feelings.

In Whitehead's philosophy there are two main types of feelings: the conceptual and the physical. There are permutations of these through the categorial obligations (iv), (v), and (vi), which allow for various kinds of interaction and combination. These we shall discuss presently. However first we propose to analyze a feeling since it is the basic unit with which we shall have to deal.

> A feeling--i.e. a positive prehension--is essentially a transition effecting a concrescence. Its complex constitution is analysable into five factors which express what that transition consists of, and effects. The factors are: (i) the 'subject' which feels; (ii) the 'initial data' which are to be felt, (iii) the 'elimination' in virtue of negative prehensions, (iv) the 'objective datum' which is felt (v) the 'subjective form' which is how that subject feels that objective datum.[1]

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[1] Ibid., pp. 337-38.

Whitehead's analysis of these factors proves that the feeling is in all respects determinate. There is a determinate subject, determinate initial data, determinate negative prehensions, a determinate objective datum, and a determinate subjective form.[1] This determination is in keeping with the strain of Leibnizian pre-established harmony which runs throughout his system.[2]

The evanescent 'subject' which feels is a part of the feeling; or rather the feeling is a part of the 'subject' which feels. The initial data which are to be felt constitute the multiplicity of eternal objects, propositions, objectified actual entities and nexūs in the actual world of the concrescent subject. The elimination in virtue of negative prehensions expresses the fact that the subject is not *concerned* with all the data in its actual world or environment. However there are limitations of the ability of the actual occasion to show this lack of concern or to exercise the faculty of negative prehension. An actual entity in the actual world of a subject *must* enter into the concrescence of that subject by *some* simple causal feeling, however vague, trivial and submerged. Negative prehension may eliminate its distinctive importance. But in some way, by some trace of causal feeling,

[1] *Ibid*., p. 338.

[2] *Ibid*., pp. 41, 338, 389.

the actual entity is prehended positively. In the case of an eternal object, there is no such necessity. In any given concresence, it may be included positively by means of a conceptual feeling; but it may be excluded by a negative prehension. "The actualities _have_ to be felt, while the pure potentials _can_ be dismissed. So far as concerns their functioning as objects, this is the great distinction between an actual entity and an eternal object. The one is stubborn matter of fact; and the other never loses its 'accent' of potentiality."[1] The negative prehensions are thus determined by the nature of the initial data and by the subjective aim dominating the concrescent process.

The objective datum is what is finally taken into the real internal constitution of the subject after the elimination by negative prehension is completed. The subjective form, the _how_ the subject feels the datum, is thus determined by the negative prehensions, the objective datum, and by the subjective aim or the conceptual origination of the subject. The examination of the feeling thus discloses the 'subject' to be securely embedded within the feeling. We find that we can speak Whitehead's language in an intelligible manner but we wonder if we are really talking about anything at all except a relation attached to one term while it frantically seeks to create another.

[1] _Ibid._, p. 366.

Now that we know the formal structure of all feelings we may examine various kinds of feelings. Obviously feelings may be different because of their subjects, because of their initial data, because of their negative prehensions, because of their objective data, and because of their subjective forms. "There are many species of subjective forms, such as emotions, valuations, purposes, adversions, aversions, consciousness, etc."[1] We are seeking now to discover the nature and origin of consciousness. Thus we are concerned with those feelings which have consciousness as one of their subjective forms.

Consciousness is found in the subjective forms of intellectual feelings.[2] Intellectual feelings are of two kinds; (1) conscious perceptions, (2) intuitive judgments. A conscious perception is a feeling which is obtained by the union of a propositional feeling with a physical feeling. Likewise an intuitive judgment is a complex feeling obtained by the union of a propositional feeling with a physical feeling. The difference is one of types of propositional feelings. In the conscious perceptions the propositional feeling is termed perceptive; in the intuitive judgment the propositional feeling is imaginative. Thus

[1] *Ibid.*, p. 35.

[2] *P.R.*, p. 391.

it is apparent that propositional feelings are the key to intellectual feelings and thereby to consciousness. An understanding of intellectual feelings and consciousness presupposes an understanding of propositions and propositional feelings.

In Chapter II we noted that propositions for Whitehead are a hybrid-type of existents, midway between universals and particulars, the tales that might be told about actual entities. "A proposition must be true or false. Herein a proposition differs from an eternal object; for no eternal object is ever true of false."[1] This difference between the eternal object and the proposition lies in the element of determinate particularity attached to a proposition. A proposition is referent to a definite world of actual occasions. "The 'locus' of a proposition consists of those actual occasions whose actual worlds include the logical subjects of the proposition."[2] "Evidently new propositions come into being with the creative advance of the world. . . . The proposition 'Caesar crossed the Rubican' could not be felt by Hannibal in any occasion of his existence on earth."[3] Thus while a universal is a pure potential, co-eternal with God himself,

[1] Ibid., p. 392.

[2] Ibid., p. 283.

[3] Ibid., p. 396.

the proposition achieves immortality after its birth into the world. Furthermore, since an eternal object is referent to any entity, in the absolutely general sense of any, there can be no reason upon which to found the truth or falsity of an eternal object. But a proposition is particular, referent to the determinate actual entities which are its logical subjects. The proposition is a "tale" about the logical subjects and the definite set of eternal objects involved which are called the 'predicates of the proposition.' The predicates define a potentiality of relatedness for the subjects. The predicates form one complex eternal object: this is the complex predicate.[1] Thus 'out there' in reality there is a nexus of logical subjects and a complex eternal object which defines or characterizes those logical subjects. The proposition is a "tale" about that state of affairs. It is "a notion about actualities, a suggestion, a theory, a supposition about things."[2]

Since the existence of propositions is ontological rather than epistemic we are not surprized to find a correspondence theory of truth. "The truth of a proposition lies in its truth-relation to the nexus which is its logical subject. A proposition is true when the nexus does in

[1] Ibid., p. 283.

[2] Cf. A.I., p. 312.

reality exemplify the pattern which is the predicate of the proposition."[1] Now we recall that propositions" must be true or false." Apparently false propositions exist in the same way as true propositions. This is evidenced by the pronouncements that the role of a proposition is that it serve as a lure for feeling; and that it is more important that a proposition be interesting than it be true.[2] However, Whitehead always adds that a true proposition is more apt to be interesting than a false one for the importance of truth is that it adds to interest. If Whitehead actually finds propositions 'out there' in nature we certainly see no reason why he should not list them in his categorial scheme as existents. If he means by a true proposition what a critical realist means by a 'fact' then we are inclined to agree with him. But the objective existence of false propositions requires some rationalization. As a matter of fact (!) Whitehead does hold in *Process and Reality* that propositions both true and false have objective existence. There he speaks of propositions as being *true* or *false*, and of judgments being *correct*, or *incorrect*, or *suspended*. Propositions are thus objective but judgments are subjective.[3]

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[1] *Ibid*., p. 313.

[2] *P*.*R*., pp. 395-96; A.I., p. 313.

[3] *Op*. *cit*., Part II, ch. ix, Sections I, II.

For further proof of the objective existence of propositions in Process and Reality we need only to recall that propositions constitute one of the four main types of objects or data. Whitehead states that two conditions must be fulfilled in order that an entity may function as an object in a process of experiencing. First, the entity must be antecedent, and second the entity must be experienced in virtue of its antecedence; it must be given." "Thus an object must be a thing received, and must not be either a mode of reception or a thing generated in that occasion. Thus the process of experiencing is constituted by the reception of objects into the unity of that complex occasion which is the process itself. The process creates itself, but it does not create the objects which it receives as factors in its own nature."[1]

The status of propositions in Process and Reality must be interpreted as that of objective existence. As such Whitehead has not explained how false propositions come into existence with the creative advance of novelty.

In the account of propositions given in Adventures of Ideas Whitehead shifts his ground. "Propositions like everything else except experience in its own immediacy only exist as entertained in experience."[2] A proposition

[1] A.I., pp. 229-30. The italics are his.

[2] Op. cit., p. 314.

is an extreme case of appearance.[1] Appearance is used in the sense of the opposite of reality. It is the "effect of the activity of the mental pole, whereby the qualities and coördinations of the given world undergo transformation."[2] Again we have the correspondence theory of truth. "Truth is the qualification which applies to appearance alone. Reality is just itself, and it is nonsense to ask whether it be true or false. Truth is the conformation of appearance to Reality."[3] Thus propositions are the forms of appearance for high grade actual occasions. They are obviously subjective. The notion of judgment, whether correct, incorrect or suspended, is significantly missing. The propositions in Adventures of Ideas play the same role as the judgments of Process and Reality. The notion of propositions with an objective ontological existence has been abandoned entirely.

The theory of propositions given in Adventures of Ideas is a much more tenable one than that given in the earlier work. Since there is an obvious advancement in epistemological thinking we see no special reason for taking Whitehead to task for the inconsistency. But such inconsistency is confusing to some who fail to remember that great philosophers are subject to progress in understanding as well as the lesser ones. Whitehead should have indicated the change in his position.

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[1] Ibid., pp. 312-13.

[2] Cf. Ibid., p. 270.

[3] Ibid., p. 309.

There is however a grave fault involved in this clear instance of progressive thinking. That is that Whitehead's theory of consciousness is explicable only in terms of the unsatisfactory theory of propositions given in Process and Reality. Whitehead's blithe transition to a new theory of propositions thus leaves consciousness unexplained. In the new theory, propositions presuppose consciousness. In the old theory consciousness presupposes propositions. Thus in our thesis we can only give the categorial account of consciousness in terms of a theory of propositions which Whitehead explicitely repudiates. Just how he would explain consciousness under his new theory is hard to comprehend. Certainly it would call for some categorial reorganization. It is significant to note that in Adventures of Ideas when consciousness is discussed the reader is referred to Process and Reality.[1] We might conclude that Whitehead is either unaware of his change of position, or that he is aware of the change but is not aware of the implications for his sytem that the change involves. At any rate he has not done anything about it.

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[1] See A.I., pp. 347-48. The references to Process and Reality are Part II, ch. vii, Section II, and Part III, ch. ii, Section IV, and chapters iv and v.

Let us examine briefly how consciousness arises in the feeling of propositions. The proposition is a datum for feeling, awaiting a subject feeling it. It is a lure for feeling and many subjects may feel it with diverse feelings, and with diverse sorts of feelings. Thus a proposition is relevant to all actual occasions which fall within the locus of the actual world of its logical subjects. The proposition is prehensible by them. But of those actual entities which fall within the locus of a proposition, only some will prehend it positively. For example, the proposition 'Caesar crossed the Rubicon' was just as much a datum for the river Rubicon as it was for the people of ancient Rome. Only the river felt it passively as mere physical reenaction while the high grade actual occasions which were moments in the brain-minds of the citizens of Rome felt it with the subjective form of consciousness.

Given a high grade actual occasion in concrescence, a propositional feeling can arise. For propositional feelings arise only in a late phase of the process of the prehending subject.[1] An analysis of a propositional feeling, which reveals the feeling to be rather complex, discloses four types of feeling involved in the one propositional feeling:[2]

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[1] P.R., p. 397.

[2] This account is derived from P.R., pp. 397-405.

(1) A physical feeling of the actual entities which are the logical subjects of the proposition. This type of feeling is termed indicative. (2) A physical feeling from which the predicative pattern is derived. The pattern is the arrangement of the logical subjects in a complex contrast with the eternal objects which define and determine the subjects. These eternal objects are the predicates of the proposition. Thus this physical feeling is a feeling of the 'patterned' nexus as such. This feeling is called 'physical recognition.' It may be the same as the indicative feeling or it may be different from it. When they are identical the final feeling is called conscious perception; when they are different, intuitive judgment. (3) A conceptual feeling of an eternal object derived from the physical feeling under heading two. (4) A conceptual feeling which is a reversion from the previous type of conceptual feeling and which involves a different eternal object. Either eternal object, whether of the conceptual feeling of type three or type four is the predicative pattern.

According to the above analysis the propositional feeling arises in the later phase in which there is integration of the 'indicative feeling' with the 'predicative feeling.' The actualities which were first felt as sheer matter of fact have been transformed into a set of logical subjects with the potentiality for realizing an assigned predicative pattern. The proposition is the potentiality for consciousness. Whether consciousness arises or not depends on whether the circumstance of a conscious subjective form of a propositional feeling is congruent with the subjective aim dominating the concresence.[1] However if consciousness be in harmony with the subject, it arises when the proposition is felt in a certain way.

> The subjective form will only involve consciousness when the 'affirmation-negation' contrast has entered into it. In other words, consciousness enters into the subjective forms of feelings, when those feelings are components in an integral feeling whose datum is the contrast between a nexus which is, and a proposition which in its own nature negates the decision of its truth or falsehood.[2]

Since the proposition is existent and must be felt, though the feeling may involve only "aversion, or adversion, that is to say, decision," we may state our conclusion this way: The capacity for consciousness is latent in all high grade actual occasions; the proposition elicits consciousness. The proposition is the *sine qua non* of consciousness.

In the identification of consciousnes with the feeling of affirmation or negation contrast Whitehead implies two things: First, that consciousness means mental awareness and secondly that this awareness is that of a contrast. The contrast is between a 'proposition' about 'something' and that something itself. Thus consciousness is the subjective form of a higher type of complex feeling. We might say that Whitehead holds a functional theory of consciousness. There is a complex relation between the proposition and the subjective aim which is determining the how of the feeling. When the proposition is there and the subjective aim is of the right sort then consciousness arises in the subjective form of the feeling.

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[1] *P.R.*, p. 399. Also Categorial condition VII.

[2] *Ibid.*, p. 399. The italics are his.

Thus except for its linkage with the dubious theory of propositions the theory has a kinship with the pragmatic theory of mind. It clearly shows how the self can be conscious at certain moments of its life history and unconscious at others. Consciousness has a twofold origination. The proposition is the datum given by the world of settled fact. The subjective aim which decides how the proposition is to be felt is given by God. Consciousness is a functional aspect of the two.

We may close this section with Whitehead's own summary of the nature of consciousness. "Thus to sum up: (i) Consciousness is a subjective form arising in the higher phases of concrescence. (ii) Consciousness primarily illuminates the higher phase in which it arises, and only illuminates earlier phases derivatively, as they remain components in the higher phase. (iii) It follows that the order of dawning, clearly and distinctly, in consciousness is not the order of metaphysical priority."[1]

[1] Ibid., p. 246.

SECTION III. PERCEPTIVE KNOWLEDGE

It will be recalled that consciousness is found in the subjective forms of intellectual feelings. The intellectual feelings are divided into two kinds: conscious perceptions and intuitive judgments. These in turn were defined as being the integration of a propositional feeling with a physical feeling. In the one case the propositional feeling is perceptive, in the other case the propositional feeling is imaginative. Such an investigation reveals that consciousness is a functional aspect of intellectual feelings. We find also that in the notion of conscious perception we have been introduced to the concept of knowledge and in the notion of intuitive judgment we have become acquainted with the idea of imagination. Now that we may deal entirely on the level of consciousness we can examine Whitehead's categorial account of perception and judgment. It is not the purpose of this section to give a complete account of Whitehead's epistemology. We merely hope to point out certain of its chief implications for a theory of human mentality.

Frankly we are in sympathy with Whitehead's general theory. We have pointed out the chief difficulties involved in the notion of the subject-superject. However if the concrescent process once be put in motion then Whitehead has a growing subject, a feeler that is at once the feeler and the emergent of the feelings. The feelings of the earlier phases have grown together because of the principle of concretion which guides the concrescent process. Thus the 'subject' at a later stage is the concretion of the feelings of the earlier stages. This concretion of feelings is that which reacts to all subsequent feelings. The subjective form, which is how the subject reacts to the datum thus has an agent responsible for the activity. Whitehead thus reverts to subject-predicate categories but with a difference. The subject is continually growing, enlarging itself, fluid and never static. Whitehead has to resort to "double-talk" about the subject which is the feeler and the superject which is the emergent of the feelings. But the double-talk is deliberate. To us the theory is intelligible--once the process of feeling be started. That is an unsurmountable obstacle for Whitehead's philosophy. For if the subject be placed as the initial feeler of all feelings, including the originative physical and conceptual feelings, then Whitehead would be using the term "subject" in a sense similar to the traditional usage. This he cannot do. Thus Whitehead's real contribution of the sense of growth in all occasions of experience is apt to be overlooked, discredited and lost because he obstinately refuses to give an intelligible account of the initial subject. The subject-superject is a brilliant contribution but must be discredited if there is no rational explanation of how there can be subjects that grow into superjects.

An examination of Whitehead's theory of knowledge reveals another difficulty. Even if we admit that the doctrine of the subject-superject allows room for the activity of the subject there still remains the fact that all prehensions are causal. Thus there is a creative aspect of all prehensions, whether physical, conceptual, or perceptual. Judgments, evaluations, etc., are thus reactions to feelings which are 'subjective.' All that can be said of the subjective forms, or of the perceptions, is that they are facts in the real internal constitution of the growing actual occasion. The ontological identification of causation and perception thus robs knowledge of its claim to objective validity. This is one point in which there is a conflict between Whitehead's extra-categorial presupposition about knowledge and the categorial implications for a theory of knowledge.

According to Whitehead "each actual entity is a throb of experience including the actual world within its scope. The problems of efficient causation and of knowledge receive a common explanation by reference to the texture of actual occasions."[1] That there is the ontological identification of knowledge with causation is borne out in this striking passage: "Every actual entity has the capacity for knowledge, and there is graduation in the intensity of various items of knowledge; but in general, knowledge seems to be negligible apart from a peculiar complexity in the constitution of some actual occasion."[1] The point of these statements apparently is that only a certain kind of causation, i.e., conscious perception, has the name knowledge applied to it. A final quotation affirms our contention of the categorial 'subjectivity' of perception and judgment. "Thus an actual entity, on its subjective side, is nothing else than what the universe is for it, including its own reactions. The reactions are the subjective forms of the feelings, elaborated into definiteness through stages of process."[2]

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[1] P.R., p. 290.

The crucial point for a theory of knowledge is whether there can be any 'transcendence' of the given in the subjective form of the prehension. The subjective form is the how of the feeling; this how may be an evaluation, a judgment, a negation, an affirmation or merely an emotion. Our point is that because the feeling is causal the subjective form at best can be only relative to the judging subject. There can be no transcendence of the given for if such were so that subject that transcends would not be the subject that it is. Now this may be absolute truth.

[1] *Ibid.*, p. 244.

[2] *Ibid.*, p. 234.

But if it is, how can there be a claim to metaphysical cognition?

However let us note briefly the account of intellectual feelings which is developed around Whitehead's categorial theory of propositions. Remembering that there is no such thing as 'mere knowledge'[1] we must identify knowing with a stage of growth in the concrescence. There are three successive phases of feelings, namely a phase of conformal feelings (physical), one of conceptual feelings, and one of comparative feelings which include the propositional feelings.[2] The two earlier phases may be put together as the 'supplemental phase.' Hence supplemental feelings refer either to the conformal physical feelings or the conceptual feelings. Comparative feelings are complex integrations and refer to all the feelings tinged with consciousness. Thus intellectual feelings are a species of comparative feelings and are a late stage of growth. So much for terminology.

In an intellectual feeling the datum is the generic contrast between a nexus of actual entities and a proposition with its logical subjects members of the nexus. This contrast is termed the 'affirmation-negation' contrast. Definitely there is the physical feeling of the objectified

[1] A.I., p. 5.

[2] P.R., p. 249.

nexus of actual entities. But there is also a feeling of the proposition which is a mere potentiality about the physical fact. Hence the feeling of the possibility is a 'negation' of the 'affirmation' of the physical feeling. Thus such a feeling is the feeling of the contrast between 'in fact' and 'might be.' The subjective form of the feeling of this contrast is consciousness. What Whitehead desires to point out is that there is thus gradations of conscious experience. Consciousness arises by reason of intellectual feelings, and in proportion to the variety and intensity of such feelings.[1] This accounts for the two types of intellectual feelings: conscious perceptions and intuitive judgments. In the first type he hopes to account for the fact of mere conscious awareness, in the second type for the activity of judgment.

The division is unfortunate. Whitehead continually tries to put the two together, and the result is confusing. He states, "The distinction between the two species is not absolute."[2] And again: "It is evident that an affirmative intuitive judgment is very analogous to a conscious perception. A conscious perception is a very simplified type of affirmative intuitive judgment; and a direct affirmative intuitive judgment is a very sophisticated case of conscious perception."[1]

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[1] Ibid., p. 407.

[2] Ibid., p. 415.

Whitehead should have worked out a theory of degrees of knowledge. In this way he could have spoken of 'levels of knowing' instead of getting confused with rigid distinctions in the kinds of knowledge. There would have been no dichotomy, merely a continuation of complex development.[2] At present we shall examine the lowest stage of conscious awareness, conscious perception. Intuitive judgment will be considered in the next section.

Conscious perception arises when a physical feeling is united with a propositional feeling and the propositional feeling is 'perceptive.' The propositional feeling is perceptive when the indicative feelings, which are the physical feelings of the individual actual entities that are the logical subjects of the proposition, are identical with the 'physical recognition.' The 'physical recognition' is a physical feeling of the 'transmuted type.' It feels the individual actual entities which are the logical subjects as one datum. It is the feeling of the nexus. For example, in indicative physical feelings of the simpler type we might be said to be feeling the individual blades of grass in the patch on the lawn. But in a transmuted physical feeling we feel a grassy plot.[1] The physical recognition is the physical feeling from which the 'predicative pattern' is derived. The predicative pattern is the predicate of the proposition.

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[1] *Ibid*., p. 417.

[2] Cf. R. W. Sellars, *The Philosophy of Physical Realism*, chap. v and *passim*, for a theory of levels of knowing. In regard to the point we are making also see C. W. Morris's article "Mind in Process and Reality," *The Journal of Philosophy*, XXVIII (1931), pp. 113-27. Morris states "Whitehead's view of knowing is practically identical with that of critical realism," (p. 122).

Perceptive feelings may be of two kinds: unauthentic or authentic. The feeling is unauthentic when the conceptual feelings of the eternal object which is the predicative pattern is not derived from the physical recognition. There is conceptual reversion (categorial obligation v) in which new eternal objects arise, partly identical with the correct eternal objects but also partially diverse from them. Hence there is distortion. The predicative pattern cannot truthfully be predicated of the logical subjects indicated by the indicative feelings.

The only reason Whitehead gives for this conceptual reversion which leads to 'unauthenticity' is that it is permissible by categorial obligation (v). Since this category states that "The diversity is a relevant diversity determined by the subjective aim"[2] we might conclude that unauthenticity, or error, is predetermined. God is thus responsible for error. However Whitehead's true intention may be stated thus: The physical feelings arouse in us certain expectations. For example there is the physical feeling of an object in my pocket. By conceptual reversion, partially identical with, and partially diverse from these feelings I assign the predicate 'half-dollar' to the proposition about the physical object. The flat circular object which I think to be a half-dollar turns out in reality to be the check for my top-coat. This perception through my fingertips was at the bare minimum level of conscious attention and the conception that the metal check was a half-dollar certainly involved no deliberate judgment. The act was spontaneous, much the same as when in error I reach into my pocket, withdraw the check without looking at it, and attempt to spend it at the store in exchange for a commodity.

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[1] Cf. *P.R.*, categoreal obligation VI, and pp. 355,383.

[2] *Ibid.*, p. 40.

The perceptive feeling is authentic when the conceptual feeling of the eternal object which is the predicative pattern is actually derived from the feelings in the physical recognition. In other words the predicative pattern does hold of the logical subjects indicated by the indicative feeling. Thus I feel the eternal object of 'flat circularity' as characterizing the metal disk in my pocket. No conceptual reversion is involved. Additional eternal objects like "being a hat check" or "being a half dollar" are not introduced. There is merely reception of the given in a conscious way. This is direct authentic conscious perception.

Whitehead's exposition here is confusing. After defining unauthentic perceptions as those involving conceptual reversion, and authentic perceptions as those which do not involve conceptual reversion he gives two kinds of authentic perceptions, the direct authentic and the indirect authentic. The indirect authentic are those which involve reversion.[1] Furthermore after stating that error occurs in unauthentic conscious perception but no error is involved in authentic perception he contradictorily reports: "Authentic perceptive feelings can introduce error into thought."[2]

The confusion may be resolved by analyzing the indirect "authentic" perceptions. The indirect authentic perception occurs when the "secondary conceptual feelings, entertained in the nexus by reason of reversion (cf. categoreal condition V), have been transmuted so as to be felt in the subject of the conscious perception) as if they had been physical facts in the nexus."[3] On such a view, the indirect conceptual feeling of the metal disk as a half-dollar be-

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[1] Cf. P.R., pp. 400-401; 410.

[2] Ibid., p. 410.

[3] Ibid., p. 410.

becomes as it were a part of the metal disk. "It is important to note that even authentic perceptive feelings can distort the character of the nexus by transmuting felt concept into felt physical fact. In this way authentic perceptive feelings can introduce error into thought; and transmuted physical feelings can introduce novelty into the physical world."[1]

Out of this seemingly hopeless confusion these facts emerge. (a) That Whitehead's main categories of conscious perception should not have been authentic and unauthentic with the authentic further subdivided into direct and indirect. (b) The main categories should have been direct and indirect perception. In the direct perception no conceptual reversion is involved and all perceptions of this kind are unqualifiedly "true." (c) In the indirect perceptive mode are all those which involve reversion. Conceptual reversions may be either authentic or unauthentic. Thus if the metal disk turns out to be a half-dollar the reverted novel conceptual feelings derived from memory, perhaps, are authentic. (d) That on this foundation we could construct an acceptable theory of levels of knowing. For the notion of intuitive judgments fits quite well as the next stage of intellectual functioning.

In the next section we shall see that what distinguishes

[1] Ibid., p. 410.

the level of intuitive judgment from that of perception is that in the former there is a difference between the indicative feeling and the physical recognition. When the indicative feelings and the physical recognition are not identical the propositional feeling is termed "imaginative." Thus there is room for judging whether the predicative pattern derived by conceptual feeling of the physical recognition is in some degree applicable to the logical subjects or not. Error thus may arise. However by definition, in conscious perception the indicative feelings and the physical recognition are identical. Whitehead seems to want to assert that in conscious perception there can be no error. He desires a level of bare awareness, of bare conscious recognition, of that and nothing more. In the next stage of intuitive judgment, he talks frankly about error. According to our rearrangement of his notions such a conception of a hierarchy of knowing becomes intelligible.[1]

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[1] John Blyth, op. cit., claims that the confusion about direct authentic feelings which involve reversion is due to a typographical error. The passage, according to him, should have read 'indirect authentic perceptions involve transmutation.' Whitehead describes indirect authentic perceptions on p. 410 in unmistakable terms as involving reversion. It appears that Mr. Blyth read p. 401 but not p. 410. As a matter of fact all perceptions, except that of a conscious alien mentality (p. 387), involve transmutation.

SECTION IV. JUDGMENTAL KNOWLEDGE

Whitehead states that while there is no absolute distinction between an intuitive judgment and a conscious perception the final differentiation is that a conscious perception is the outcome of an originative process which has its closest possible restriction to the fact thus perceived.[1] The previous distinction which we have cited is that in the conscious perception the indicative feelings and the physical recognition were the same while in intuitive judgment the indicative feeling and the physical recognition are different. In the first case there is the feeling of many blades of grass as one "grassy plot." Thus in the perceptive propositional feeling there is (1) the indicative feeling of many blades of grass which is (2) identical with the physical recognition of one nexus of many blades of grass and (3) the conceptual feeling of the predicative pattern derived from (2). Therefore in conscious perception there is the feeling of the nexus out there and the proposition about that nexus. We entertain the notion "That is a grassy plot." According to Whitehead there is little freedom here (barring conceptual reversion), for the outcome of this originative process adheres strictly to fact.

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[1] *P.R.*, p. 415.

In the intuitive judgment the 'physical recognition' is different from the indicative physical feeling. Whitehead tries to account for this difference in two ways. Both of these ways seem incapable of rationalization and moreover lead to certain difficulties. The first method is a shift in the meaning of the term 'physical recognition.'[1] Now in the intuitive judgment there are two distinct physical feelings: the indicative feeling and the physcial recollection. This physical recollection is different from the indicative feeling. It is the imaginative transmuted physical feeling of the logical subjects. It provides the predicative pattern for the conceptual feeling.

Our criticism of this is that the transmuted physical feeling is no longer a bonafide physical feeling. Some conceptual functioning is involved and the emphasis seems to be on the conceptual side. The physical recollection now appears to be a projective act. The term 'recollection' seemingly is intended to imply the use of memory. Thus we could feel the grassy patch of lawn as we had felt other

[1] *P.R.*, p. 413. Whitehead uses the term 'physical recognition' to describe the physical feelings from which the predicative pattern is derived in perceptive propositions and imaginative propositions alike on pp. 397-403. In pages 413 ff. he uses the term 'physical recollection.' This may be a typographical error. However there is a shift in the meaning of the term 'physical recollection' such that to us it no longer connotes a transmuted physical feeling.

patches of meadow which may have been clover. But this seems to be explained better in terms of conceptual reversion rather than in terms of "physical imagination."

The second method Whitehead uses to get novelty in the physical feeling is to declare that there is some kind of reversion taking place in the indicative feelings. Thus the physical recollection is different from the indicative feelings because of complex factors of integrations which lie below consciousness.[1] Such an interpretation leads Whitehead to a theory of error which we think is essentially unsatisfactory. "It will be noted that the intuitive judgment in its subjective form conforms to what there is to feel in its datum. This error cannot arise from the subjective form of the integration constituting the judgment. But it can arise because the indicative feeling, which is one of the factors integrated, may in its origin have involved reversion. Thus error arises by reason of operations which lie below consciousness, though they may emerge into consciousness and lie open for criticism."[2]

This theory of error is unnecessarily complex. On the one hand it states that there is no error in the subjective form which is the conscious judging of the given. The error is made previously. The error is given to consciousness. On the other hand it states that the error which arises because of reasons which lie below consciousness may emerge into consciousness and be open for criticism. Thus in criticism we may make an error about an error. The clearest example we know would be a case of illusion.. The illusion itself is an error. The bent stick in the water is given to us as such and the given is erroneous. We may err again in the criticism of the given.

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[1] Cf. Ibid., pp. 414-415.

[2] Ibid., pp. 414-415.

A modification of Whitehead's theory may be effected without changing any of his basic notions. Such a reorganization of his ideas yields a surprisingly good theory of the perceptive and judgmental processes. First, there should be no difference in any perceptive act between the indicative physical feelings and the transmuted physical feelings. Thus at the level of bare conscious awareness there would be a conceptual feeling of the predicative pattern derived from the physical recognition (or physical recollection). Since no conceptual reversion is involved this amounted to a theory of the 'mere given' as being given as it is. It has not been distorted by mental activity. Furthermore it is neither true nor false. Truth and falsity would arise if a belief arose about the given. There would be no error involved in the perception of the stick as being bent. Error would arise if we made a judgment or entertained a belief.

The second point is that if there be no difference in any perceptive act between the indicative physical feelings and the transmuted physical recognition, then the imaginary propositions must be explained in terms of reversions of the conceptual feelings. Thus freedom is explained in terms of mental activity. There is no radical distinction between the conscious perception and the intuitive judgment. The intuitive judgment merely faces more possibilities. The predicative pattern is not derived directly from the physical recognition although what is given is given. Memory, desire, or emotion might enable us to see in the small patch of grassy lawn a meadow green and undulating. The meadow arises from the lawn through conceptual reversion. Error would come if we judged the meadow to be the lawn. Our point is that Whitehead complicates unnecessarily his very good contributions.

We must however give Whitehead's theory of intuitive judgment. The condensed analysis of the stages of origination is (i) the indicative feeling and the physical recollection. These are different. (ii) The predicative feeling derived from the physical recollection. This is the conceptual feeling. (iii) The imaginative feeling derived by integration of the predicative feeling with the indicative feeling. This is the propositional feeling. (iv) The intuitive judgment derived by integration of the imaginative feeling with the indicative feeling. The judgment is placing the theory up against the fact.

We are in agreement with this analysis when our foregoing modifications are read into it. The term imaginative feeling is used in a broad sense. It is a generalization from the notion that "the triumph of consciousness comes with the negative intuitive judgment."[1] The feeling of there being a rose would be consciousness. But that it is a rose and not a gardenia nor a tulip would be imagination. Intuitive judgment recognizes that it might be either one but judges that it is one and not the other.

In the higher levels of conscious development, except in moments of idle conscious awareness involving inattention to truth, feelings are usually tinged with the element of belief. Whitehead terms this a 'belief character.' It is a certain form, or eternal object, that ingresses in the emotional pattern and seeks enhancement of intensity of feeling. Belief for Whitehead is a psychological fact. It is about propositions but is in no way a part of propositions.[2] "It is a great mistake," he writes, "to describe the subjective form of an intuitive judgment as necessarily

[1] *Ibid.*, p. 417.

[2] Cf. *P.R.*, pp. 408-409.

including definite belief or disbelief in the proposition."[1] Whitehead finds three cases. (i) The generic contrast which is the datum of the intuitive judgment may exhibit the predicate of the proposition as exemplified in the nexus. In this case, the subjective form will include definite belief. (ii) The predicate may be exhibited as incompatible with the eternal objects exemplified in the objectified nexus. In this case the subjective form will include definite disbelief. (iii) The predicate may be exhibited as irrelevant, wholly or partially, to the eternal objects exhibited in the objectified nexus. Here the subjective form needs exhibit neither belief nor disbelief. There is a state of indecision and this subjective form is termed 'suspended judgment.' This analysis therefore shows three types of intuitive judgments. Beliefs, disbeliefs, and suspended judgments.[2]

The suspended judgment occurs more often than the cases of immediate belief or disbelief. In a sense it is more important for the business of living, though all suspended beliefs must eventually be resolved into one or the other of the definite types. Whitehead thus has a strong pragmatic element in his philosophy but the element is not ultimate. Suspended judgment should come to definite decisions. "Otherwise the poor pragmatist remains an intellectual Hamlet, perpetually adjoining decision of judgment to some later date."[3]

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[1] Ibid., p. 415.

[2] Cf. ibid., pp. 415-16.

[3] Ibid., p. 275.

As a matter of fact there are two strains of thought in Whitehead. He defines truth in terms of correspondence but when he comes to judgment he adopts a theory which closely resembles pragmatism but which really is not. The suspended judgment may be in a state of indecision indefinitely. But its truth consists not in its 'working' but in its approximation to a definite step in the direction of asserting the facts about the logical subjects. This may be shown by an analysis of the suspended judgment. It arises exactly as any other judgment. The suspended judgment consists in the integration of the imaginative feeling with the indicative feeling, in the case where the imagined predicate fails to find complete identification with the objectifying predicate. There is the feeling that the logical subjects definitely are things and the feeling that the logical subjects may be one or the other of several different types of things. In the instance of the metal disk in my pocket which may be a coat check or a half dollar I have this contrast of feeling. Scientific theory is of this same type of suspended judgment. Progress is made in the direction of definite belief if new evidence is compatible with the theory. In the case of the metal disk, if it should fall from my pocket without my seeing it, then the 'ring' or tone of the noise it makes in striking the floor would be either compatible or incompatible with the theory that it is a silver half dollar.

If suddenly stricken blind, minute fingering of the etched surface of the disk might indicate whether it is a coin or not.

It may be noted that while suspended judgments depend upon delayed tests each test itself is in a sense immediate. That is to say, that no matter how long I delay descision about the metal disk, when I finally decide, then that decision is itself a case of immediate decision. Any guarantee must also in a sense be immediate. Whitehead does not completely recognize that his metaphysics involves such a view. He states two immediate guarantees of the correctness of a conscious perception, none for judgments. However it would seem that they hold for judgments too. One is Hume's test of 'force and vivacity,' and the other is the illumination by consciousness of the various feelings involved in the process. Neither of these tests he believes to be infallible. He also states that there is the delayed test in which the future may conform to expectations derived from assumptions.[1] This is the test discussed in connection with judgment and which we believe must finally be resolved into a case of immediate judgment.

Obviously Whitehead is appreciative of constructive elements in the pragmatic theory of truth. However his attempt to utilize it while holding a correspondence theory of truth reveals a half-hearted vacillating inconsistency. Whether there can be any real sense in holding a correspondence theory of truth in connection with a pragmatic theory of judgment is a problem as yet undecided. Whitehead makes two different approaches to the problem. One is supposedly logical and mathematical. 'Proof' he believes to be a feeble second rate procedure. Self-evidence is the basic fact on which all greatness supports itself. Proof is one of the routes by which self-evidence is often obtained. But proof should render itself unnecessary by producing self-evidence. Self-evidence is sheer disclosure. "Understanding is self-evidence. But our clarity of intuition is limited, and it flickers. Thus inference enters as means for the attainment of such understanding as we can achieve."[1] On this view 'mystical insight' might well account for true knowledge.

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[1] _Ibid._, cf., p. 411.

The second solution to his difficulty is in reality much the same as the first. It is the famous passage from Adventures of Ideas. We quote it only in part.

> The point to be decided is whether the green meadow in spring-time, as it appears to us, in any direct way conforms to the happenings within the region of the meadow, and more particularly within the regions of the blades of grass. Have we any grounds for the belief that in some way things really are in those regions as our senses perceive those regions . . . ?
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> There is no necessity about it. Evidently there is failure, interference, and only partial adjustment. But

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[1] Cf. M.T., pp. 66-69.

we have to ask whether nature does not contain within itself a tendency to be in tune, an Eros urging towards perfection. This question cannot be discussed without passing beyond the narrow grounds of the truth-relation.[1]

Our categorial and metaphysical account of Whitehead allows us to draw the inference that such is the case.

One acquainted with Whitehead will observe that our technical concern with feelings may readily be translated into the more familiar epistemological notions of Whitehead. Thus the indicative feelings and the physical recognitions correspond to causal efficacy. Presentational immediacy corresponds to the conceptual feeling of the predicative pattern. Symbolic reference is the feeling of the contrast between the logical subjects and the predicates which might be assigned to them. Conceptual analysis corresponds to the final stages of judgment, whether belief, disbelief, or suspended opinion.

We have preferred to deal with the more technical aspects because they show more clearly that all feelings and subjective forms are constitutive stages of the concrescent process. One can take Whitehead's popular terminology and construct a convincing theory of knowledge in complete independence of his subject-superject theory in which the percipient emerges from his perceptions.

A point we have stressed in this chapter has been that Whitehead's metaphysical bases cannot account for any objectivity in knowledge. We fail to find any transcendence of the growing process in the intellectual functioning of the moments of the brain. At times it seems that Whitehead desires some transcendence. But transcendence could be only in the subjective form and that itself is contributive to the growing subject. Even of judgments he writes: "But the main function of intellectual feelings is neither belief, nor disbelief, nor even suspension of judgment. The main function of these feelings is to heighten the emotional intensity accompanying the valuations in the conceptual feelings involved . . . . The proposition is a lure for the conditioning of creative action."[1] On such a view Whitehead is consistent when he states that a judgment is "a real fact in the constitution of the judging subject . . . . The judgment is made about itself by the judging subject, and is feeling in the constitution of the judging subject."[2]

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[1] Cf. *op*. *cit*., pp. 322-23.

Whitehead's categorial account of thought shows how a categorial scheme may arise. But it does not show why that categorial scheme should be more than the reproduction of certain constructive components in the life history of a certain philosopher.

[1] P.R., p. 416.

[2] Ibid., p. 291.

CHAPTER V

LANGUAGE

SECTION I. SYMBOLISM

Language is the proper topic of this chapter. More specifically, the discussion of language is attempted within the context of Whitehead's categorial scheme and its implications. Complete conformity to this ideal is of course impossible. For then we should speak solely in terms of feelings. As a propadeutic to the specific subject matter we shall begin with a brief discussion of two notions of very wide generality, namely, symbolism and communication. Language is an aspect of each.

Since we are dealing with the human level we may use Whitehead's formal definition of symbolism:

> The human mind is functioning symbolically when some components of its experience elicit consciousness, beliefs, emotions, and usages, respecting other components of its experience. The former set of components are the 'symbols,' and the latter set constitute the 'meaning' of the symbols. The organic functioning whereby there is transition from the symbol to the meaning will be called 'symbolic reference.'[1]

Three things stand out about this definition of symbolism. First, it is to be noted that Whitehead defines symbolism and meaning in terms of active synthetic elements in the nature of the percipient. Thus he maintains the ontological principle that to search for a reason is to search for an actual occasion. The second obvious point is the broad generality of the definition. "The human mind is functioning symbolically when some components of its experience elicit consciousness, beliefs, emotions and usages respecting other components of its experience." This is entirely in keeping with his general theory of feelings and of mentality being immersed in the nature of the actual occasion. There is no strict definition of symbolism solely in terms of conscious, rational activity. Not only beliefs, but 'emotions' and 'usages' may be the result of symbolic reference. Later we shall examine these in detail.

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[1] S., pp. 7-8.

The third point is not as clear as the others. But it is keeping with the whole of Whitehead's philosophy. It is that consciousness presupposes symbolism. This is the same point we stressed in the previous chapter. Symbolism is the cross reference between the two fundamental types of feeling--physical feelings and conceptual feelings. Physical feelings are always there, deep and permanent, beneath the thin and occasional veneer of consciousness. Conceptual feelings are always there too but light, evanescent, of little significance unless illuminated by consciousness. But when illuminated by consciousness conceptual feelings assume proportions far out of keeping with their real importance. In the language of the previous chapter the physical feelings are indicative feelings and physical recognitions or recollections. Hereafter they shall be called feelings of 'causal efficacy.' The conceptual feelings are the feelings of the eternal objects, the feelings of predicative patterns, of the tales about the actual occasions of the real word. Hereafter these feelings are termed feelings in the mode of 'presentational immediacy.' Recognition of the contrast between causal efficacy and presentational immediacy elicits consciousness. This is the first stage of all symbolic reference. Thus consciousness itself may be fitful and intermittent. And there may be degrees of consciousness. But when there is consciousness there is some active process of symbolic reference.

In this chapter we shall deal only with symbolism after the initial stage of consciousness has been attained. Hence the organic functioning of symbolic reference which is the transition from the symbol to the meaning will always be that of conscious human beings.

We shall attempt to order the great extensiveness of Whitehead's definition of symbolism by indicating three distinct types (not completely separate but conceivably so) of symbolic reference which his theory involves. First there is the symbolic reference which is intended to elicit belief. This may be termed 'predication' because our analysis of judgments which involved 'belief' hinged around the correct association of the predictive pattern to the logical subjects. Thus predication is the belief that certain 'predicates' are applicable to certain logical subjects. In symbolic reference the predicates stand for the subjects. The predicates mean the subjects. Belief is the judgment that they do in fact correctly represent the subjects. Thus the perceptual sensa before me which are in the mode of presentational immediacy mean the real actual occasions which I am feeling in the mode of causal efficacy. The data in the mode of presentational immediacy are symbols which elicit beliefs about the existence of books on the table.

A second type of symbolism stands in marked contrast to predicative symbolism. This is the emotive symbolism of art. "We do not listen to the music in order to gain a just appreciation of how the orchestra is situated. When we hear the hoot of a motor car, exactly the converse situation arises. Our only interest in the hoot is to determine a definite locality as the seat of causal efficacy determining the future."[1] Emotive symbolism, whether artistic, religious, or patriotic thus serves to arouse in us certain emotions. Music is not the subject for judgmental belief. Yet again it may well be. We may judge it as to its accuracy in the correct depiction of the score. We may even be concerned with certain tones in order that we may judge the local arrangement of the instruments of the orchestra. But primarily the purpose of emotive symbolism is to arouse in us emotions. It may be fear, or sadness, or happiness, or courage, or determination.

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[1] S., p. 84.

Emotional symbolism lies at the basis of any theory of art or of aesthetics. This is a separate field from our immediate enquiry. We cannot go into it in any great detail for we are concerned chiefly with judgmental or predicative symbolism.

Whitehead has a third type of symbolism which he designates by the vague term 'usages.' What he means by this is difficult to comprehend for it is not elucidated. We conjecture it to be a type of symbolism which is concerned primarily with excitation to pragmatic action. The sign elicits an act spontaneously. There is little judgment or conceptual analysis involved. The symbol causes us to respond in an instinctive kind of way. The simplest example of this kind of symbol is that which points. The sign points to a thing; it directs our attention to an object. The symbol thus elicits a conscious action, but one which is so nearly automatic that no judgment is involved. An arrow pointing in a certain direction indicates the direction we are to go. The exclamation "look!" is a verbal symbol of the same kind.

Now it is clear that indication is a part of predicative symbolism as well as of emotional symbolism. It underlies the sensa of presentational immediacy. Long before we judge the sensory images to be associated with causally efficacious books on the table the images have said "look!". The musical tones of the orchestra announce themselves in the same indicative way; the sounds serve notice that they are there to be enjoyed. It is a well known fact that deaf people do not enjoy music. They miss completely the indicative symbols. Also people with good hearing may be engrossed in reading and thus there may be negative prehension of the indicative symbols. Attention has not been arrested and it is as if the reader were deaf.

The conclusion we draw from this analysis is that indication is the basic category inherent in the very nature of symbolic reference. Whether symbolic reference be primarily concerned with the elicitation of belief or of emotion there must be indication. We confess frankly that to read 'usages' as meaning 'indication' is perhaps putting more into Whitehead than he states. However we believe that he must have intended to imply the type of thing we have explained.

It will be noted that Whitehead's general metaphysical position gives him an adequate basis for the explanation of predicative symbolism. The success is so nearly complete that we are tempted to ask if he has not oversimplified the task by generating categories beyond necessity. The symbol stands for something. That something is the meaning. In Whitehead's system there are the real actualities which are actual occasions and nexūs and there are the eternal objects and propositions which are about the things. Thus an eternal object is a component in the definiteness of an actual entity and may be a symbol for it. Propositions are tales about actual occasions and nexūs and thus function as symbols for them. For example, suppose we are at the level of consciousness and there is the prehension of an objectified actual occasion. Then Whitehead's theory readily explains how we perceive the entity. "The organic philosophy does not hold that the 'particular existents' are prehended apart from universals; on the contrary, it holds that they are prehended by the mediation of universals. In other words, each actuality is prehended by means of some element of its own definiteness. This is the doctrine of the 'objectification' of actual entities."[1] This passage illustrates clearly how sensa are symbols for things.

[1] *P.R.*, p. 230.

"Those eternal objects which will be classified under the name 'sensa' constitute the lowest category of eternal objects."[1]

Thus sensa exist in external nature in things and we perceive the things through sensa which are components in those things. Since sensa are of the lowest type of eternal objects even "the simplest grade of actual occasions must be conceived as experiencing a few sensa, with the minimum of patterned contrast." For example, "Occasions A, B, and C enter into the experience of occasion M as themselves experiencing sensa s_1 and s_2 unified by some faint contrast between s_1 and s_2. Occasion M responsively feels sensa s_1 and s_2 as its own sensations. There is thus a transmission of sensation emotion from A, B, and C to M. If M had the wit of self analysis, M would know that it felt its own sensa, by reason of a transfer from A, B, and C to itself."[2]

This is the categorial substantiation of Whitehead's denial of the bifurcation of nature. Thus he maintains that in nature there is "the greenness of the trees, the song of the birds, the warmth of the sun, the hardness of the chairs, and the feel of the velvet."[3] For "throughout the whole story, the sensa are participating in nature as much as anything else."[4]

[1] Ibid., p. 174.

[2] Ibid., pp. 176-77.

[3] C.N., p. 31.

[4] P.R., p. 496.

If Whitehead's theory of eternal objects takes care of the sensa in symbolic reference his theory of propositions also accounts for complex types of symbolism. Sensa are low grade eternal objects. Contrasts and patterns are high grade eternal objects. They express a manner of relatedness between other eternal objects.[1] We need only to recall that our whole discussion of propositions and judgment hinged around 'predicative patterns' and 'contrasts' between what is and what might be. Thus propositions are symbols for a given state of affairs out there in nature. The sensum 'greyness' is a symbol meaning stone. The predicative pattern which is the arrangement of the objects on this table is a contrast between what is and what might be. My perception of the proposition gives me a symbol which means that particular state of affairs. Our analysis discloses that since there is no generic difference between the low grade eternal object which is a sensum and the high grade eternal objects which are patterns and contrasts there is no especial reason to talk about propositions. In fact they only complicate the issue. We have pointed out in the previous chapter that Whitehead discards the notion of the objective existence of propositions in Adventures of Ideas. However they are the *sine qua non* of consciousness so we continue to refer to them.[2]

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[1] *P.R.*, p. 174.

[2] Cf. above, ch. IV, Section II.

A little analysis shows that Whitehead's theory of symbolism readily accounts for error in symbolic reference. In the true sense of the word 'error' there should be no error in the symbol itself. Mistakes occur only in the judgmental activity involved in the synthetic act of symbolic references. "Aesop's dog, who was a poor thinker, made a mistake by reason of an erroneous symbolic reference from presentational immediacy to causal efficacy."[1] Presentotional immediacy here refers to 'sense-reception' which is the symbol and causal efficacy refers to the concrete state of affairs or the 'meaning' which gives rise to the symbol. Had Aesop's dog been a good thinker he would have correctly equated the symbol with the meaning.

Whitehead's theory also accounts for a species of 'error' which we choose to call 'delusive perception.' In a real sense it is not error at all but is conducive to judgmental error. An excellent example is the passage in Section 10, of the fourth Dialogue of Berkeley's Alciphron. Whitehead is fond of quoting it.[2]

> Euphranor. Tell me, Alciphron, can you discern the doors, window and battlements of that same castle?
>
> Alciphron. I cannot. At this distance it seems only a small round tower.
>
> Euph. But I, who have been at it, know that is is no small round tower, but a large square building with battlements and turrets, which it seems you do not see.

[1] S., pp. 20-21.

[2] See P.N.K., pp. 9-10; S.M.W., p. 96.

Alc. What will you infer from thence?

Euph. I would infer that the very object which you strictly and properly perceive by sight is not that thing which is several miles distant.

Alc. Why so?

Euph. Because a little round object is one thing, and a great square object is another. Is it not so? . . .

Whitehead's solution of the difficulty lies in his theory of the extensive continuum. Each actual occasion occupies a definite region or volume in the space-time continuum and it is from that standpoint that it perceives the universe. This location is particularly important for the "real essence of a thing indicates 'where' the entity is, that is to say, its status in the real world."[1] Thus there are gradations in the relevance of other objects for functioning in the internal constitution of the growing actual occasion. There is a certain amount of negative prehension at the level of pure causal physical feelings. Gradations of relevance account for distortion at a distance in the same way that it accounts for the complete disappearance of the castle if the distance be greatly extended. In Whitehead's philosophy there would still be the physical feeling of the castle but its intensity would be of such small magnitude that it could not elicit into consciousness any conceptual feeling.

Other 'delusive perceptions' which might lead to error

[1] P.R., p. 94.

in judgment are explained by malfunctioning of the body.

"When we perceive a contemporary extended shape which we term a 'chair,' the sense-data involved are not necessarily elements in the 'real internal constitution' of this chair-image: they are elements--in some way of feeling--in the 'real internal constitutions' of those antecedent organs of the human body *with* which we perceive the 'chair.' The *direct* recognition of such antecedent actual entities, *with* which we perceive contemporaries, is hindered and, apart from exceptional circumstances, rendered impossible by the spatial and temporal vagueness which infect such data."[1]

This is in keeping with Whitehead's general position that physical feelings are prior to conceptual feelings in sensitive experience. The conscious mental operations originate from the indicative physical feelings and the transmuted physical feelings which produce the predicative patterns. Thus the body may be the cause of delusive symbols. But error arises only when we fail to take into account the way in which the body is functioning. Without glasses the titles of the books on the shelf are blurred. But I do not judge the printing to be smudgy. However Aesop's dog might make that mistake.

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[1] *Ibid*., pp. 100-101. The italics are his.

SECTION II. COMMUNICATION

Because of the panpsychistic tinge to Whitehead's metaphysics any feeling might be termed a communication. For all feelings involve the prehension of actual occasions by the mediation of universals. Thus a feeling is the transmission of a 'meaning' by a 'symbol.' However we shall define communication in terms of what it seems to mean in civilized discourse. In this way Whitehead's panpsychism will lead us into no ambiguities. Communication is the transmission of a meaning between two conscious mentalities when (a) the first mentality has the intention to convey the meaning to the second mentality and (b) the second mentality is aware of the meaning. These conditions hold both for predicative meanings and for emotive meanings. Some kind of indicative symbol will of course underlie all communication.

Our definition assuredly is neither behavioristic nor positivistic. If we confine the analysis of communication to the investigation of predicative meanings we readily see that there can be understanding of the first mentality's meaning by the second mentality even though the second mentality does not react in the way the first mentality intended. The second mentality understands the first mentality's intention, when, if he so desired, he would react in the way that the first mentality desired him to react. This seems to be nothing but common sense. The Regents of the University wish to communicate a certain meaning to the students. A sign is erected which reads 'No Bicycle Riding On the Campus.' A particular student, call him B, upon perceiving the sign dismounts from his bicycle and walks. However the following day, B is a trifle late for the Aristotle lecture. He disregards the sign and rides hurriedly along. We would say that he understood the sign on both occasions. This statement also holds for those students who have never heeded the sign.

Our theory holds the same for informative meanings as it does for pure commands. These of course are not strictly separate. They are species of predicative meanings. A command requests action and an informative meaning conveys a bit of information. Yet the command predicates something and the informative proposition issues a subtle command. The single word 'Poison' on the label of a bottle is a case where information and command are uniquely combined.

Whitehead, we believe, would be in essential agreement with our analysis of communication. But we feel that his theory of the subject-superject cannot account for the conscious projective activity which obviously is involved when A wishes to communicate to B. As a concrescent actual occasion A is a growing together of many feelings, all of which are on the receptive side. Any activity of A must be interpreted solely in terms of the subjective forms of his many feelings. Since B is like A, B is constructed so as to receive meanings and to interpret them. But the embarrassing point is that A cannot consciously, willfully, and intentionally transmit them. Much against his will Whitehead's criticism of Behaviorism applies also to his subject-superject.[1] If a behaviorist can only behave a subject-superject can only feel.

Perhaps because he senses this defect in his philosophy Whitehead develops in some length the notion of 'expression' in Modes of Thought. "There are two sides to an animal body of the higher type," he writes, ". . . a living body is a peculiarly close adjustment of these two sides of experience, namely, expression and feeling."[2] However as far as we are able to discern this importation into his philosophy of a term not used at all in Process and Reality fails to alleviate the difficulty. He defines expression as "the diffusion in the environment, of something initially entertained in the experience of the expression."[3] Our analysis of the 'self' (Cf. above,

[1] Cf. M.T., pp. 31-32. "A consistent behaviourist cannot feel it important to refute my statements. He can only behave."

[2] Cf. op. cit., p. 32.

[3] Ibid., p. 29.

Chap. III, Sec. III), which in the case of the human organism would be the 'expressor,' shows that only the individual actual occasions are existent. The inherent unity among the successive moments which is termed the 'self' is constituted by a group of eternal objects transmitted throughout the series. Thus there is nothing over and beyond the various moments to do any expressing. Indeed, we might quote from Modes of Thought. "The soul is nothing else than the succession of my occasions of experience, extending from birth to the present moment."[1]

Thus the only 'expression' possible in Whitehead's system is that by which the actual occasion perishes and obtains objective immortality. That he does identify 'expressions' with objectified actual occasions seems to be apparent at times. He writes "Feeling (in the sense here used), or prehension, is the reception of expressions . . . . Expressions are the data for feeling diffused in the environment."[2] Now it seems to us that "perishing" is not exactly what common sense interprets intentional activity to be.

Strictly in terms of the categorial notions Whitehead cannot explain human activity of the intentionally projective sort. No doubt the root of the difficulty lies in the fact that he has no adequate theory of the self. And though the notion of the subject-superject undoubtedly expresses some important features of the growth of human mentality it is unsatisfactory as it now stands.

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[1] Op. cit., p. 224.

[2] Ibid., p. 32.

There are however some excellent foundations in Whitehead's philosophy for a theory of communication. First, there is his theory of universals. In this we have shown that he is a Platonic realist. Eternal objects have a separate existence and ingress into concrescent processes. But they are the same for all actual occasions. Thus if A can arouse in B the notion of redmess than A and B will be prehending the same eternal object. Secondly, there are the propositions. If by the right use of words (since language is rather inadequate for the precise expression of propositions) one can arouse in another the notion of a certain preposition then the two will be entertaining the same proposition. Propositions are hybrid universals but universals just the same.

A third basis is Whitehead's belief that there can be an identity of minds. That is to say, two selves at one moment of their life history may have the same mental pole and be dominated by the same subjective aim. "There is nothing self-contradictory in the thought of many actual entities with the same abstract essence; the abstract essence is a complex eternal object."[1] A nation at war, where people are dominated by a common purpose and a common aim, provides an excellent example of this. (If there ever were a nation so dominated.) Under such circumstances communication would be as spontaneous as conversation with oneself. Perhaps it is so that at moments of our lives we do think the same thoughts as our loved ones and knowing that that is so we find it unnecessary to make overt communicative acts.

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[1] P.R., p. 94. Also cf. above, Chap. III, Sec. II.

A fourth factor in Whitehead's philosophy is that the unqualified inclusiveness of prehensions allows one to prehend alien mentalities. There is a striking feature about the prehension of other selves and Whitehead points it out." Our usual way of consciously prehending the world is by these transmuted physical feelings. It is only when we are aware of alien mentalities that we even approximate to the conscious prehension of a single actual entity."[1] This prehension of alien mentalities explains how we can know the subjective factors functioning in the constitution of other actual entities. Or rather we should say this type of prehension plus the theory of eternal objects. Whitehead has two kinds of eternal objects: the 'objective' species and the 'subjective' species. The objective kind are those which are elements of definiteness in actual occasion and nexūs which are data for feelings.

[1] *Ibid*., p. 387.

The role of an objective type eternal object is to introduce one actual entity, or nexus, into the real internal constitution of another actual entity. Thus in a sense the objective species of eternal objects function relationally and because of their 'incurable objectivity' account for the solidarity of the world. "Eternal objects of the objective species are the mathematical platonic forms. They concern the world as a medium."[1]

An eternal object of the subjective species is, in its primary character, an element in the definiteness of the subjective form of a feeling. "It is a determinate way in which a feeling can feel. It is an emotion, or an intensity, or an adversion, or an aversion, or a pleasure, or a pain."[2] Thus an eternal object of the subjective species defines the subjective form of feeling one actual entity. Recalling that we can prehend alien mentalities we may use Whitehead's example to carry our point. "A_1 may be that component of A's constitution through which A is objectified for B. Thus when B feels A_1, it feels 'A with *that* feeling.' In this way, the eternal object which contributes to the definiteness of A's feeling becomes an eternal object contributing to the definiteness of A as an objective datum in B's prehension of A.

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[1] *Ibid*., p. 446.

[2] *Ibid*., p. 446.

The eternal object can then function both subjectively and relatively. It can be a private element in a subjective form, and also an agent in the objectification."[1]

The point may not be as important for a theory of communication as it is for the solution of a moot problem of epistemology, namely the knowledge of the pleasures and pains of other selves. Since Whitehead makes these supposedly private sensations into eternal objects it is readily understandable how we can know them. It will be noted by those acquainted with Whitehead's works that this is the point of divergence with Santayana. "Now the exact point where Santayana differs from the organic philosophy is in his implicit assumption that 'intuitions themselves' cannot be among the 'data of intuition,' that is to say, the data of other intuitions. This possibility is what Santayana denies and the organic philosophy asserts."[2] Santayana maintained that intuitions themselves, which could not be the data of other intuitions, were "instances of consciousness, like pains and pleasures and all remembered experiences and mental discourse."

Whitehead's position is that not only can we feel a feeling but we can even feel the how of that feeling. The 'how' being the subjective form which is an eternal object of the subjective species. Since eternal objects are the same for all actual occasions Whitehead simplifies the theory of knowledge and of communication. But in doing this he creates another threat to the individuality of the actual occasions. The uniqueness of actual occasions as we have pointed out is already rather doubtful. (Cf. above, Chap. III, Section II.) Even though actual occasions prehend the same eternal objects, the same objectified actual occasions, nexūs and propositions, there was the lurking hope that the how, or the subjective forms of the prehensions, could miraculously account for a difference. Now that they are revealed as eternal objects there seems small chance for any principle of individuality in the categorial scheme at all.

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[1] Ibid., p. 446.

[2] Cf. P.R., pp. 215-217. The reference is to Scepticism and Animal Faith.

SECTION III. LANGUAGE

Language is man-made symbolism which performs all of the three kinds of symbolism mentioned in Section I. In one respect it is the artificial representation or predication of things which are ordinarily 'given' by natural symbols like sensa and images. In a second respect is is evocative or emotive symbolism. And in the third sense it is indication.[1] These three functions of language are built upon the very nature of the natural symbolism itself. Some advantage is gained by its abstractness. Yet there is a disadvantage because abstraction allows error to creep in.

Language in the most intellectual aspect, that of predication, has two chief functions. It is converse with another and it is converse with oneself.[2] How language is conversation with oneself will be treated specifically in the next section titled "Thought and Language." What we wish to point out here is that Whitehead is asserting the chief importance of language to be communication. For whether one converses with oneself or with another it is still communication. Self conversation is the communication from one's past into one's present. Thus it is the transmission of meanings between two actual occasions. Conversation with another is communication when there is the intentional transfer of meaning. Let us note how language is peculiarly adapted to communication.

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[1] Cf. Wilbur M. Urban, Language and Reality (New York: The Macmillan Company, 1939), p. 68. "Speaking generally . . . present day linguistics recognizes these three primary meaning functions of language, representation or predication, indication, and the emotive or evocative, three types of meaning which are present in some form wherever there is linguistic fact, and which are irreducible one to the other."

[2] Cf. M.T., p. 46.

The efficacy of language in communication is based upon the metaphysical foundations for communication. This is demonstrated when we notice what it is that language abstracts from experience. Let us examine an instance of sense perception. There is an undeniable particularity about the sense perception of a green tree; for it is that sense perception in *that* particular actual occasion. Yet the eternal objects which are the 'greenness' of the tree and the 'treeness' of the tree may function in the sense perceptions of the green tree in many other actual occasions. The eternal objects are the same for all actual occasions. Yet there is no contradiction involved for identity is a 'one-many' relation.[1] The eternal objects are one in the many sense perceptions. Language abstracts from the many sense perceptions and captures the inherent identity in a single verbal phrase. Thus the artificial symbol, the words 'green tree,' is referent alike to the many sense perceptions of the green tree. The inherent identity permeating all the sense perceptions is contributed by the eternal objects. The verbal phrase 'green tree' symbolizes those eternal objects as characterizing a certain physical fact in nature. The important point is that whether there is any naming of the identity or not there is still the identity. Language captures that identity.

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[1] Cf. D. H. Parker, "Reflexive Relations," *The Philosophical Review*, XLII (1933), pp. 303-11.

What we have just shown about eternal objects also holds for propositions. For propositions are quasi-universals relating to real facts in nature. Language fastens onto those facts when it attempts to express the proposition.

> Consider, for example, the homely illustration of the angry man who knocks his neighbor down. We each of us frame a pictorial imagination of such a scene. But the flux of imagined sensa is not of the essence of thought. The event may have generated sensory schemes in a thousand ways. It may have happened by day, or by night. It may have happened in the street, or in a room. Every variety of attitudes for victor and for vanquished is indifferent. Yet amid all this ambiguity of sensa, the stubborn flux of events is asserted, that the fist of the angry man completely upset the stable functioning of his victim's body. It is not a flux of sensa which is asserted, but a bodily collapse as the result of the expressiveness of the angry man . . .
>
> Deserting this special example, different sensory experiences derived from the same action have a unity, namely in the identity of the action.[1]

The passage brings out clearly the functioning in thought and in communication, of Whitehead's higher grade eternal objects. These eternal objects, mentioned previously, are patterns and contrasts. Predicative patterns which characterize the logical subjects of propositions are the complex eternal objects which function in intellectual feelings. Thus if we get a verbal phrase which serves as a symbol for a certain physical nexus those words arouse in us the same image. For the words lay hold of the eternal objects which form the 'pattern' of the act. But again we reiterate that it is chiefly Whitehead's metaphysics which accounts for communication rather than his theory of language. Language mirrors his ontology.

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[1] Cf. M.T., pp. 47-48.

Whitehead does not use the term 'concept' in any significant sense in his philosophy. However he does use the term 'conceptual feeling.' His general ontological position readily allows a translation of conceptual feeling into something very analogous to what idealistic philosophers mean by the term 'concept.' The realm of concepts would be that subjective species of eternal objects which is the subjective form of conscious conceptual feelings. This subjective form amounts to a conscious recognition of the predicative pattern which is felt. Thus all propositional feelings involve 'concepts.' In this way my conscious prehension of the eternal object 'green' gives me a 'concept' of green. Likewise my conscious awareness of the proposition which is a tale about an angry man knocking his neighbor down gives me a 'concept' of that act. However with Whitehead's theory of mind, of conceptual feeling, and of universals there is no special reason why he should speak of 'concepts.'

SECTION IV. SPEECH AND WRITING

We have not yet considered the fact that we employ two distinct types of language, namely, the language of sound and the language of sight. There is speech, and there is writing. Of the two alternatives sound was the medium first developed. Whitehead's explanation of the preference for sound fits in well with his position on the physical feeling of causal efficacy. Aside from the advantage of sound that it leaves the limbs free while we produce it, Whitehead contends that

> . . . There is a deeper reason for the unconscious recourse to sound-production. Hands and arms which are involved in gesticulation constitute the more unnecessary parts of the body. We can do without them. They do not excite the intimacies of bodily existence. Whereas in the production of sound, the lungs and throat are brought into play. So that in speech, while a superficial, manageable expression is diffused, yet the sense of the vague intimacies of organic existence is also excited. Thus voice-produced sound is a natural symbol for the deep experiences of organic existence.[1]

From this quotation it is clear that it is in speech that language reaches its heighth in emotional and indicative symbolism. Whitehead recognizes this and states: "Speech in its embryonic state as exemplified in animal and human behavior, varies between emotional expression and signalling. In the course of such variation it rapidly becomes a mixture of both. Throughout its most elaborate developments, speech retains these three characteristics, namely, emotional expression, signalling, and interfusion of the two."[1]

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[1] *Ibid.*, p. 45.

The advance to signalling is a stage beyond that of mere emotional expression. The "grunts and growls of the forest" are then endowed with communicative meaning beyond the stage of mere elicitation of bodily feeling. The signal of the embryonic stage was "this reaction to that situation in this environment. In the origin of language the particularity of the immediate present was an outstanding element in the meaning conveyed."[2] Thus at this early stage the genus 'bird' remained in the background of undiscerned meaning. What language conveyed was the direction of attention to particular birds amid particular surroundings.

When civilized man could think of 'birds' without thinking of that bird in that environment he had made an intellectual stride. "Our ancestors could merely think of green in reference to some particular spring morning . . . We cannot congratulate ourselves too warmly on the fact that we are born among people who can talk about green in abstraction from spring-time."[3]

Writing appeared with the advancement in the abstractive powers of speech. Written language fastened upon the enduring entities found in experience. That is why 'green' is 'green' whether the equivalent be printed in a German dictionary, a French dictionary or plain English. The word itself is a symbol representative of a universal. Whitehead's general metaphysical position is consistent with this.

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[1] Ibid., p. 52.

[2] Ibid., p. 53.

[3] Ibid., p. 54.

Whitehead cites a good example to prove his point about dangers inherent in the abstractions of written language. He takes the simple phrase 'a warm day.' In a book, as interpreted by a standard dictionary, the words have a generalized meaning. But there is a difference indicated by the ejaculation 'a warm day' when the speakers are in Texas, or on the coast of England bordering the North Sea. Yet there is an identity of meaning.[1]

It is the awareness of such commonplace difficulties as these that makes Whitehead sceptical of the efficacy of language to adequately state propositions. We shall examine this in the next section.

SECTION V. THOUGHT AND LANGUAGE

Whitehead's categorial argument respecting the adequacy of language to properly express propositions hinges around the inherent particularity of propositions

[1] *Ibid*., p. 54.

versus the generality of words. Thus in the preceding section two entirely distinct propositions, one about the weather conditions in Texas, the other about the same in England, were expressed by the single phrase 'a warm day.' Let us examine language in the thought process and see how it functions in an ambiguous way.

"Spoken language is merely a series of squeaks."[1] Its function is (a) to arouse in the prehending subject some physical feeling indicative of the logical subjects of the proposition, (b) to arouse in the prehending subject some physical feeling which plays the part of the 'physical recognition,' (c) to promote the sublimation of the 'physical recognition' into the conceptual 'predicative feeling,' (d) to promote the integration of the indicative feeling and the predicative feeling into the required propositional feeling.[2] Of course in this complex function there is always a tacit reference to the environment of the occasion of utterance. Speech, like all symbolism, is indicative. The point is that in abstraction from the occasion of utterance, apart from the environment and enshrined in a printed book it may be difficult to understand completely what one means by verbal phrases like 'Socrates is mortal.'

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[1] _P_._R_., p. 403.

[2] Cf. _Ibid_., 405.

A summary of Whitehead's analysis of this verbal phrase reveals that one meaning may involve the logical subjects which are one singular It (Socrates) and the actual entities of the actual world, forming a society amid which mortality is realizable and including the former "It." In another meaning, there are also included among the logical subjects the actual entities forming the Athenian Society. These actual entities are required for the realization of the predicative pattern 'Socrates and mortal' and are the definitely indicated logical subjects. In this meaning as contrasted with the former there is the requirement that "this actual world be such as to support 'Athenianism' as well as immortality, and in conjunction with mortality."[1]

The analysis brings out a point with which most of us agree. There is ambiguity in any verbal phrase. But of greater importance still for the aim of this section it shows how language functions in the thought process. Language replaces the natural symbols of the real world but it functions in the same way as they do. Language stands for those universals 'Socratic,' 'Athenianism,' 'immortality,' which would have been present to us had we lived in ancient Greece. On this view it is quite conceivable that thought functions without language. Language, as it were, is a mere addendum. This conclusion is supported by three points

[1] Ibid., p. 405.

First, that mentality is generic with existence; secondly, that causation and knowledge receive a common explanation. The third point is Whitehead's theory of universals and propositions. As data for feeling they are potentials for every becoming, whether rocks, animals or men. The difference in all grades of becoming is one of degree. Thus there could be conscious intellectual judgment solely in terms of the 'natural' elements of the world.

This is the position, though modified, which we find in Modes of Thought where Whitehead attacks the doctrine that language is thought and that thought is language. He has two arguments against this extreme doctrine of language. (i) If the sentence is the thought, then another sentence is another thought. Yet there is translation from language to language, or within the same language between alternative sentences. Hence we must conclude that there is a 'meaning' which lies beyond the words. (ii) Some of us struggle to find words to express our ideas. If the words and their order constitute the ideas, how does the struggle arise? "We should then, be struggling to obtain ideas; whereas we are conscious of ideas verbally unexpressed."[1]

On the basis of these two arguments Whitehead concludes that language is not the essence of thought.

[1] Op. cit., p. 49.

But he carefully limits this conclusion. For language facilitates the retention of thought, the easy recall of thought, the interweaving of thought into higher complexity, and the communication of thought. "Human civilization is an outgrowth of language, and language is the product of advancing civilization. Freedom of thought is made possible by language: we are thereby released from complete bondage to the immediacies of mood and circumstance."[1]

What we see here in Whitehead is a revision of the radical "tool-making" theory which he advocated when constructing the terminology of the categorial scheme. Though he often makes remarks like "There is evidence that three thousand years ago there were deep thinkers, enmeshed as to their imaginations in the trivial modes of presentation belonging to their own day,"[2] he no longer holds the radical view of the independence of thought and language. His final conclusion respecting human nature is "that the mentality of mankind and the language of mankind created each other. If we like to assume the rise of language as a given fact, then it is not going too far to say that the souls of men are the gift from language to mankind. The account of the sixth day should be written, "He gave them speech and they became souls."[3]

[1] *Ibid*., pp. 49-50.

[2] *Ibid*., p. 56.

[3] *Ibid*., p. 57.

This account of language and thought is consistent with the categorial implications. It is a radical departure from the "tool-making" theory which was a presupposition of Whitehead's extra-categorial philosophy.

SECTION VI. PHILOSOPHY AND LANGUAGE

The categorial account of philosophy in relation to language shows a divergence from the extra-categorial account. In the latter we were led to believe that philosophy achieved its miraculous insights and then struggled to express them in words. Now, however, we find language to be one of the chief sources of philosophy. In reply to the question of the nature of the sources from which philosophy gets its evidence Whitehead writes: "The main sources of evidence respecting this width of human experience are language, social institutions, and action, including thereby the fusion of the three which is language interpreting action and social institutions."[1] Thus the despised language now delivers its evidence in the meanings of words, in the meanings enshrined in grammatical forms, and the "meanings beyond individual words and beyond grammatical forms, meanings miraculously revealed in great literature."

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[1] A.I., p. 291.

What we discover in Whitehead again is compromise. On the same page we find "Thus an appeal to literature, to common language, to common practice, at once carries us away from the narrow basis for epistemology provided by the sense data disclosed in direct introspection." And another statement "Thus in philosophy linguistic discussion is a tool, but should never be a master. Language is imperfect both in its words and in its forms."[1]

On this revised view Whitehead is still able to maintain that subject-predicate language is inadequate. Defective insights of the earlier periods become rooted in language and literature. Furthermore, language dictates our unconscious presuppositions of thought. It is in this way that we fall into the false habit of thinking of subjects and predicates rather than of subject-superjects with ingressing eternal objects. Another example of the way our language causes us to err is by its very structure. Single words, each with its dictionary meaning, and single sentences, each bounded by full stops, suggest the possibility of complete abstraction from any environment. This of course leads us into the fallacy of simple location. The problem of philosophy is then falsely conceived to be the understanding of the interconnection of things, each understandable, apart from reference to anything else.[2]

[1] Ibid., p. 293.

[2] Cf. M.T., p. 90.

Whitehead's revised position on the relationship between philosophy and language reveals the following. (a) That language is not the essence of thought. "Language halts behind intuition."[1] (b) That language is one of the chief sources of evidence for philosophic speculation. (c) That language can and does lead us astray. (d) That language is the sole means for the expression of philosophic speculation. The combination of these factors leads Whitehead to the position that philosophy is akin to poetry. In fact, all attempts at the expression of understanding is akin to poetry. "Hence the role of literature, the role of the special sciences, and the role of philosophy:--in their various ways engaged in finding linguistic expressions for meanings as yet unexpressed."[2]

As an example of philosophical poetry he quotes from Euripides' *Trojan Women* (886-7): "Zeus, whether thou are compulsion of Nature or Intelligence of Mankind, to thee I prayed." For Whitehead the ideas involved, 'Zeus,' 'necessity [compulsion] of nature,' 'intelligence of mankind,' and 'prayer,' comprise the main philosophical problems of European thought.

Whitehead's point is that in dramatic intuition there is a triumph over mundane and temperamental scepticism.

[1] *Ibid*., p. 68.

[2] *A*.*I*., p. 291.

In the extra-categorial philosophy of thought, language and speculation there was the apparent alliance of philosophy with science. In the light of the implications of the categorial theory of feelings philosophy goes over to the side of poetry. The final quotation should be Whitehead's. We remark that in it there is a suggestion of the basis for a "coherent, logical, necessary system of ideas"; but it is just a faint whisper.

> If you like to phrase it so, philosophy is mystical. For mysticism is direct insight into depths as yet unspoken. But the purpose of philosophy is to rationalize mysticism: not by explaining it away, but by the introduction of novel verbal characterizations, rationally coordinated.
>
> Philosophy is akin to poetry, and both of them seek to express that ultimate good sense which we term civilization. In each case there is reference to form beyond the direct meanings of words. Poetry allies itself to metre, philosophy to mathematical pattern.[1]

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[1] M.T., pp. 237-38.

CHAPTER VI

CONCLUSION

SECTION I. SUMMARY

Because of the interrelatedness of Whitehead's categorial notions our study of thought and language has often been concerned with basic metaphysical principles. This is as we had hoped: that our investigation should be in the light of the whole and that it in turn should shed some light on the whole. A brief recapitulation of the main points of our thesis reveals the 'focused extensiveness' of the investigation. For thought and language are absurdly insignificant except for the activities of human beings. Yet the very nature of thought and language is such that they are referent to their environment. Thus it is that our thesis has been concerned with the macroscopic world as well as with those microscopic elements which are mental functions.

In the first chapter we noted that for Whitehead the chief task of philosophy is to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. In giving a critique of this schematic method we found three reasons why Whitehead prefers this method. First, a frame of reference gives a better analysis of one's ideas. Secondly, a scheme is amenable to deduction. Thirdly, a scheme of interrelated ideas best mirrors a continuous and coherent universe.

Apart from the mechanics of the scheme, however, we wished to explore the metaphysical nature of thought and language within the framework of categorial notions. For if the categorial scheme explains every element of experience it must certainly explain the activities of thinking and communicating. We found our problem to be unique because there are certain clearly defined presuppositions about thought and language which lie at the foundations of the scheme itself. Thus there are the extra-categorial philosophies of thought and language which lie open for easy inspection and there are the categorial accounts of thought and language which can be clearly discerned only after a thorough study. We gave a brief description of the extra-categorial philosophies of thought and language. Whereas for thought there was great faith in intuition and speculation, there was extreme pessimism about the ability of language to adequately express the penetrative insights. Thought appeared to be relatively independent of language for language was merely its tool. Philosophy could redesign language in the same way that, in a physical science, pre-existing appliances are redesigned.

We set up the hypothesis that there is an inconsistency between these extra-categorial presuppositions and the implications for thought and language as they are delineated within the framework of categorial notions. Because of the nature of the actual occasions and the doctrine of prehension we predicted that thought would be portrayed as merely a stage in the growth of actual occasions. Hence there could be no objectivity of the kind involved in the speculative creation of a categorial scheme. Moreover we stated that there would be a shift from the scientific point of view to poetic mysticism.

For language we stated that the categorial doctrine would involve a revision of the radical tool-making theory. Categorial implications were such that language would play a more integral part in the thought processes.

However we remarked that we did not wish to attempt a rigid proof of extra-categorial and categorial inconsistency. Rather we were to use our hypothesis as a guide to method of procedure. Thus the thesis was to be written from a critical point of view and the procedure was to be successive steps in the analysis of high grade actual occasions. We then gave an outline of the proposed study which included an examination of the categorial scheme, of the notions subject, self, and mind, and finally of thought .

and language themselves. The final chapter we stated would involve a summary with some justification of the hypothesis.

Chapter II was a necessary propadeutic to an intelligent discussion of thought and language in unfamiliar and difficult terminology. In its comprehensiveness it examined the formal structure of the scheme, Whitehead's attack on subject-predicate categories and the doctrine of substance, and all of the chief categories of the scheme. Particularly noteworthy in this chapter we believe, is the analysis of the contradiction between the Platonic theory of universals and the Aristotelian ontological principle. Also the explanation of all four principles, the ontological, the principle of process, the subjectivitst, and the relativity principle extracted the essence of the philosophy of organism. Not to be overlooked is the fact that a complete examination of the categories as categories often brings out points often unheeded. For example, apparently only scant heed has been paid to the relationship between the category of multiplicities and the traditional concept of classes.

In our third chapter we examined the notion of subject-superject which is applicable to actual occasions; the notion of self-hood which is the identity inherent in a series of actual occasions; and the notion of mentality, or mind, which we found to be complementary to all physical existence.

We found the notion of the subject-superject to be intelligible though it is difficult to comprehend what it is that initially begins to feel. Our analysis of the genesis of actual occasions showed a dominance of God and the mental pole in the concrescent process. However, we pointed out that the mental pole is the principle of guiding concretion and that the physical pole supposedly contributes the element of unique individuality. We proved conclusively that Whitehead's principles can give no rational basis for uniqueness in the actual occasions. In this proof we pointed out the inexorable implications of his theory of universals when combined with the notion of a fluid concrescent subject-superject. Also we noted that the value category fails because Whitehead's theory of objectification reintroduces the eternal objects.

The self we explained to be the identity inherent in the succession of actual occasions which constitute an enduring object. The identity is a complex universal transmitted through each moment of existence. Because the identity is prehended from the preceding objectified actual occasions we stated that it is peculiar to the physical poles of the actual occasions which form the series. For objectified actual occasions are prehended by the physical feelings which originate from the physical pole. In the self, as in the subject, we found no basis for individuality.

The same eternal objects ingress in different series of actual occasions.

The mental poles of the occasions of experience we found to be free from physical determination. God donates each mental pole. Thus God intervenes at each moment of existence and is responsible for the continuity of content in mental states. We pointed out that Whitehead minimizes this divine activity by asserting that each mental state has a double aim: (a) At the immediate present and (b) at the relevant future. Thus there is self-determination of the continuity of subjective aim. This view however involves a theory of time which contradicts the theory of time which Whitehead uses in the definition of an enduring object. We concluded that without the constant intercession of God there is no guarantee of the continuity of mental states. Thus the Leibnizian strain of pre-established harmony looms large in Whitehead's system.

Our critique of mind showed that Whitehead has no dualism of the physical and the mental. Rather there is a duality of the two. Mentality is generic to all physical existence. Life was defined as a bid for freedom in mental functioning. Consciousness we found to be limited to the high grade actual occasions existing in the more complex types of living organisms. The traditional mind-body problem was explained in terms of the regnant authority of actual occasions existing in the brain.

In Chapter IV we examined Whitehead's idealistic procedure of reading off an account of human experience as ontology. We pointed out however that a categorial schematization of the initial descriptions broadens these insights. Hence we were justified in seeking a categorial account of human experience although the ontology itself is derived from human experience. Because the nature of speculative philosophy is that it sets up hypotheses which must be tested by empirical fact we found no essential fault with the procedure. But we did point out that Whitehead could be in error either in the procedure or in the initial description of human experience which is read off ontologically.

A rigorous analysis of the subject-object relation which is the basic structure of experience revealed that in Whitehead's philosophy the subject is explained solely in terms of the relations which are 'feelings.' Thus again in a forcible way the unsolved problem of what it is that initially begins to feel was presented. A critique of a 'feeling' revealed that consciousness and judgment are found in the subjective forms of the complex types of feelings. We also pointed out that the doctrine of feeling which explains the subject as emerging from its feelings involves the general identification of causation with all knowing, thinking, and evaluating. Hence there can be no objectivity in perceptive and judgmental activity.

Consciousness we found to be in the subjective forms of propositional feelings. We noted that Whitehead holds a theory of propositions in Process and Reality which is different from the later conception advanced in Adventures of Ideas. We pointed out that although the later theory is more acceptable it gives no explanation of consciousness. In Process and Reality consciousness presupposes propositions; in Adventures of Ideas propositions presuppose consciousness. Hence we decided to continue our investigation in terms of the categorial account of propositions.

After giving an account of perceptive knowledge in terms of feelings of various kinds we suggested certain revisions in Whitehead's philosophy. We proposed an account of levels of knowing based on Whitehead's chief notions. We fitted a revised account of judgmental knowledge onto our theory of perceptive knowledge and found that it removed some of the obscurities in Whitehead's philosophy.

Our final conclusion in this chapter was that Whitehead has excellent foundations for a theory of knowledge and judgment. But much of it is vitiated by inadequacies inherent in the notion of the subject-superject. He has no adequate theory of the self. Thus thought as implied by the categorial notions can have none of the transcendence which is presupposed of thought in the extra-categorial philosophy. Within the framework of the scheme it is difficult to comprehend how speculative philosophy with a claim to metaphysical objectivity can be possible. Thought is merely a stage of feeling in the life of the philosopher. The only unqualified truth about it is that it is in that philosopher.

In the chapter on language we began with an analysis of symbolism and communication. The general metaphysical implications of Whitehead's position form excellent foundations for intelligent accounts of both symbolism and communication. In symbolism we found that Whitehead has adequate bases for predicative, emotive, and indicative symbolic reference. We pointed out that sensa exist in nature. Also we gave an explanation of how Whitehead's theory accounts for 'delusive perceptions' due to distortion at a distance and to imperfections of the body.

The only difficulty with Whitehead's implications for a theory of communication is the nature of the subject-superject. The concrescent occasion is admirably adapted to receive meanings but it cannot intentionally transmit them. 'Expression' is equivalent to perishing and attaining objective immortality. This is a necessary consequence of the doctrine that all contemporary actual occasions happen in causal independence of each other. We pointed out that since the self or soul is merely the succession of individual actual occasions from birth to the present moment of the endurant it cannot be invoked to fill the obvious need of an active expressor in intentionally communicative acts.

We did note however that eternal objects (both objective and subjective), propositions, the identity of minds, and the prehension of alien mentalities were excellent foundations for communication. While the subjective species of eternal objects explained how we could know the pleasures and pains of others we found that such a conception involved another threat to the uniqueness of the actual occasion. For the supposedly 'private matters of fact' might easily be the same 'private matters of fact' for other actual occasions.

Language, we noted, fastens onto the concrete universal facts of experience. Thus in thought it functions as artificial symbolism of the real universal factors. Conceivably there might be thought without language. But language aids in the retention of thought, the easy recall of thought, the interweaving of thought into higher abstract complexity, and the communication of thought. Therefore Whitehead adopts the notion that thought and language create each other. This is the categorial repudiation of the extra-categorial presupposition that language is merely the tool of thought. Language within the scheme becomes a lure for feeling. Thus it is creative.

Philosophy and language are now closely related. Language is one of the storehouses of the crude evidence from which speculation derives its categories. Still Whitehead is able to maintain that errors may be enshrined in language and thereby lead us into pitfalls like those of simple location and subject-predicate categories.

Our final point was that Whitehead's categorial implications for thought and language lead him to mysticism. Mysticism is consonant with the doctrine of feelings in which we feel the whole universe. The extra-categorial speculation, though mystical, was closely allied to scientific effort. The categorial account definitely links philosophy with mystic poetry.

SECTION II. CONCLUSION

Our final conclusion is that the doctrines of prehension and the subject-superject cannot give an adequate account of the higher phases of human experience. Since the subject emerges from its prehensions there is the universal identification of feeling with causation. This is a negation of the sense of transcendent activity we experience in the act of thinking and the act of communicating with others. Furthermore speculative philosophy of the kind that constructs a categorial scheme apparently involves overt creative acts not interpretable solely in terms of receptive feelings. We believe that there is a great deal of truth in the theory of feelings; but feelings alone cannot give an intelligible account of the complex human experiences. Whitehead needs an adequate theory of selfhood which we believe will necessitiate a return to subject-predicate categories.

Indeed we see no reason why the doctrine of prehension could not be revised to function with a more plausible theory of the self than that which the subject-superject provides. For in the analysis of physical feelings which are the percepta in the mode of causal efficacy we believe that Whitehead has discovered a fundamental truth. Consider a passage in which he writes of these physical feelings:

> The former mode produces percepta which are vague, not to be controlled, heavy with emotion: it produces the sense of derivation from an immediate past, and of passage to an immediate future; a sense of emotional feeling, belonging to oneself in the past, passing into oneself in the present, and passing from oneself in the present towards oneself in the future; a sense of influx of influence from other vaguer presences in the past, localized and yet evading local definition, such influence modifying, enhancing, inhibiting, diverting, the stream of feeling which we are receiving, unifying, enjoying, and transmitting. This is our general sense of existence, as one item among others, in an efficacious actual world.[1]

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[1] *P.R.*, p.271.

It seems to us that Whitehead's admirers have seized upon the ultimate good sense in this account of human experience. But they have overlooked the fact that this account involves more than what the theory of the subject-superject provides. Critics, on the other hand, have dwelt upon the difficulties found in the notion of an emerging subject and have not fully appreciated the contribution of the theory of feelings. It is obvious that many of Whitehead's contributions may be discussed without explicit reference to his theory of the subject-superject. In Symbolism, for example, he discusses epistemology as if he were employing the traditional subject-predicate categories. The value of Whitehead's philosophy is evidenced by the persuasiveness of such accounts of perception, causation, judgment, symbolism, communication, speculation, and space-time. What we have endeavored to point out in this thesis is the lack of categorial foundations for some of these valuable notions.

We began with an hypothesis and we have submitted certain objections to Whitehead's philosophy as evidence in proof of it. We hope however that we have not been overzealous in our criticism. For such proof is of secondary importance if a better understanding of Whitehead's philosophy can be gained.

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